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NAFA Fleet Executive

The Magazine for Vehicle Management

October 1987

NAFA's Annual New Car Acquisition Survey

page 8

NEW VEHICLE ORDER
1988 Model Year, CATEGORY 1A

Management by

)

S/S#

anging your address during the next three months, his department immediately so that we can try and le to your new location.

CAR #

P

Replacement of Vehicle No.

PHH ☐

G GELCO ☐

CHEMICALS & QUIGLEY: 4 DR. MODELS ONLY

MODELS Wheels CQS #4A (4-Cylinder)

	2 Door	4 Door
CHEV Celebrity CL Eurosport	1AW27-ZV8	1AW19-ZV8
CHRYSLER LeBaron GTS Highline		HCH44
FORD Taurus L		P50
PONTIAC 6000		F19J

LECTION
(Two-tone Extra Cost)

Interior Trim and Color
☐ Vinyl
☐ Cloth

Vinyl Roof (Extra Cost)

Color

Description

ARD EQUIPMENT

der engine, automatic transmission, air conditioning, steering, power brakes, cloth or vinyl interior, body side ings, steel belted black wall radial tires, cruise control, tric window defroster, full tinted glass, full wheel covers, rmittent windshield wipers, AM/FM stereo with cassette ck, electric clock, left hand remote and right hand manual irrors, tilt steering wheel, heavy duty cooling (if available), eavy duty suspension and front floor mats (see page 3, item 3). All vehicles will be equipped with split front seats, if available.

ADDITIONAL OPTIONAL EQUIPMENT
Contact Corporate Fleet for pricing

ITEM

$
$
$
$
$
$

Total $

Decapitalize for check attached

It will be necessary to contact this department if you wish to tow a trailer.

AGREEMENT
I understand that this extra equipment, ordered at my expense, becomes an integral part of the vehicle and will immediately become the property of the leasing company. Such equipment cannot be removed when the car is sold or otherwise disposed of. I will receive no refund whatsoever on account of such extra equipment at any time, irrespective of whether or not I am transferred, leave the company, or the car is wrecked or otherwise disposed of.

FOR OFFICE USE ONLY

PHH INFO:
Client #:

Territory No.

Job Title

Date

...re Car Will Be Garaged (needed for tax purposes)

...verse side.

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NAFA Fleet Executive

The Magazine for Vehicle Management

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NAFA EXCLUSIVE

NAFA's Annual Acquisition

Mid-size cars and light trucks are, and will continue to be, the most popular vehicles in U.S. and Canadian fleets according to results from NAFA's 1988 New Car Acquisition Survey.

Responding fleets indicated 44 percent of their total 1988 model year purchases will be mid-size cars and 19 percent will be light trucks. Further, of the expected 114,196 1988 model year vehicles purchased, 15 percent will be compact cars, 11 percent large cars, eight percent mini-vans and three percent subcompact cars.

Nearly 60 percent of U.S. fleets anticipate no substantial changes in their fleet operations next year. Of those saying a change would occur, 14 percent reported they are likely to keep cars longer and for more mileage than before, 14 percent said they will likely reduce the number of vehicles in their fleets, ten percent said they are likely to lease cars they previously purchased and three percent said they will likely divest most of their fleet and switch to employee ownership.

For Canadians, 78 percent said no change in fleet operations was expected next year. Nine percent said they will likely keep cars longer, five percent said they will lease cars previously purchased, five percent will reduce the number of cars in their fleets and two percent will switch to employee ownership.

No Change in Vehicle Size

Almost all (93 percent of U.S. and 91 percent of Canadian fleets) said they do not plan to change the size of cars in their fleets next year.

This year's survey had 377 responses from U.S. and Canadian fleets controlling 376,613 vehicles, of which 356,132 are company-owned and 20,481 are leased.

U.S. fleets are currently comprised of 37 percent mid-sized cars, 32 percent light trucks, 13 percent compact cars, nine percent large cars, five percent mini-vans and four percent subcompact cars. Canadian fleets are 42 percent mid-size cars, 26 percent light trucks, 16 percent large cars, ten percent compact cars, five and one-half percent mini-vans and one-half of one percent subcompact cars.

Of 1988 model year purchases, U.S. fleets indicate 44 percent will be mid-size cars, 19 percent light trucks, 16 percent compact cars, 11 percent large cars, seven percent mini-vans and three percent subcompacts. For Canadian fleets, 38 percent are mid-size cars, 27 percent mini-vans, 15 percent

Types of Fleets Responding

Classification	Number Responding
Insurance	
U.S.	40
Canada	3
Drugs and Cosmetics	
U.S.	30
Canada	14
Food and Beverage	
U.S.	25
Canada	7
Consumer Manufacturing	
U.S.	22
Canada	1
Industrial Manufacturing	
U.S.	47
Canada	9
Chemical and Petroleum	
U.S.	17
Canada	8
Public Utility	
U.S.	31
Canada	1
Government	
U.S.	44
Canada	6
Banking and Financial	
U.S.	11
Canada	0
Other	
U.S.	52
Canada	9
Total	
U.S.	**319**
Canada	**58**
In Survey	**377**

New Car Survey

Survey Highlights

- Mid-size cars continue to be the most popular vehicle size chosen by fleet managers.
- Of 1988 model year purchases, 93% of U.S. and 91% of Canadian fleets said they will not change the size of their fleet vehicles.
- More than half of responding fleets give their drivers a choice of the make of the car they wish to drive.
- Import cars are having difficulty penetrating the fleet market. Less than 1 percent of U.S. fleets will purchase imports built outside North America.

light trucks, ten percent compact cars, nine percent large cars and one percent subcompact cars.

U.S. fleets currently have less than one percent (0.7%) import cars in their fleets, while Canadians have slightly more than one percent (1.3%). Of their 1988 model year purchases, U.S. fleets said 0.5 percent and Canadian fleets said 2.7 percent will be imports built outside North America.

Sixty-seven percent of U.S. fleet managers and 78 percent of Canadian fleet managers are responsible for purchasing corporate vehicles assigned to executives. Those who answered the survey expect to purchase 3,070 such vehicles from the 1988 model year.

Only 39 percent of U.S. fleet managers and 31 percent of Canadian fleet managers purchase vehicles for an executive car pool. They expect to purchase 729 1988 model vehicles for executive car pools.

Still fewer U.S. and Canadian fleet managers (14 and 10 percent, respectively) purchase personally-owned vehicles for corporate executives. Those that do, however, expect to buy 1,410 vehicles from the 1988 model year for executives.

More than half (51 percent) of U.S. fleets give their operators a choice of the make of car they wish to drive; in Canada, 69 percent of fleets give drivers this option. One-third of U.S. fleets give operators their choice of model of car they wish to drive; 41 percent do so in Canada. Only 11 percent of U.S. fleets give operators a choice of engine type, while 24 percent of Canadian fleets allow this.

Almost 84 percent of U.S. fleet cars purchased from model year 1987 were done so under a fleet incentive program; nearly 87 percent of Canadian fleet car purchases used incentive programs.

(Continued on page 10)

Vehicles in Fleets Responding

U.S. Company-Owned	192,930	
U.S. Leased	163,202	
Total U.S.		356,132
Canada Company-Owned	9,900	
Canada Leased	10,581	
Total Canada		20,481
Total In Survey		376,613

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank / Financial	Other	Total
U.S.											
Company-owned	20,147	2,515	6,398	5,434	23,620	17,719	52,323	44,964	1,466	18,344	192,930
Leased	16,461	23,773	7,313	10,789	62,124	15,758	4,497	1,196	952	20,339	163,202
Canada											
Company-owned	302	0	759	0	27	597	760	7,381	0	74	9,900
Leased	304	1,898	842	260	2,506	2,884	15	35	0	1,837	10,581

New Car Acquisition Survey Results Comparison 1986-1987

	1986	1987	+/-
Fleets Responding	432	377	-55
Vehicles In Fleets			
Company-Owned	194,125	202,830	+8,705
Leased	151,276	173,783	+22,507
Total Vehicles In Survey	362,307*	376,613	+14,306

*1986 "Total Vehicles In Survey" figure includes 16,906 employee-owned vehicles.

Types of Vehicles In Fleets Responding

	1986		1987			
Class	Number	Percent of Fleet	Number	Percent of Fleet	Number +/-	Percent +/-
Subcompact	15,915	5.5%	14,253	4%	-1,662	-1.5%
Compact	89,322	31.1%	49,289	13%	-40,033	-18.1%
Mid-Size	138,519	48.2%	138,773	37%	+254	-11.2%
Large	43,448	15.2%	35,567	9%	-7,881	-6.2%
Light Trucks	NA	NA	118,293	32%	+118,293	+32.0%
Mini-Vans	NA	NA	19,735	5%	+19,735	+5.0%

(Figures for light trucks and mini-vans were not requested last year.)

New Vehicles Purchased and/or Leased

	1986		1987			
Class	Number	Percent of Fleet	Number	Percent of Fleet	Number +/-	Percent +/-
Subcompact	5,943	6%	3,028	3%	-2,915	-3%
Compact	22,414	24%	17,632	15%	-4,782	-9%
Mid-Size	54,166	58%	49,850	44%	-4,316	-14%
Large	11,306	12%	12,362	11%	+1,056	-1%
Mini-Vans	NA	NA	9,361	8%	+9,361	+8%
Light Trucks	NA	NA	21,963	19%	+21,963	+19%
Total	93,829	100%	114,196	100%	+20,367	=
Total excluding 1987 model year mini-vans and trucks:						
	93,829	100%	82,872	73%	-10,957	-27%

(Continued on page 12)

NAFA's New Car Acquisition Survey

(Continued from page 10)

Please indicate the number of vehicles in your fleet in the following size categories.

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank / Financial	Other	Total	% of Total
U.S.												
Subcompact	1,279	1,705	200	31	77	1	6,712	4,004	66	67	14,142	4.0%
Compact	16,867	467	2,172	868	9,617	60	5,250	7,036	1,051	3,497	46,885	13.0%
Mid-size	17,041	21,533	9,507	6,837	39,562	8,128	1,459	14,596	876	9,195	128,734	37.0%
Large	593	1,370	660	390	1,391	4,512	530	16,823	261	5,135	31,665	9.0%
Light Trucks	712	916	2,808	6,668	12,931	18,283	38,006	16,912	125	14,754	112,115	32.0%
Mini-vans	225	1,146	473	918	8,148	750	3,215	996	100	2,348	18,319	5.0%
Canada												
Subcompact	0	0	24	0	0	0	40	47	0	0	111	0.5%
Compact	472	492	76	0	154	147	98	713	0	252	2,404	10.0%
Mid-size	60	2,257	705	50	1,588	1,534	57	1,701	0	2,087	10,039	42.0%
Large	47	167	82	10	433	383	0	2,662	0	118	3,902	16.0%
Light Trucks	1	54	489	0	260	1,217	440	3,500	0	217	6,178	26.0%
Mini-vans	2	238	228	200	193	183	140	85	0	147	1,416	5.5%

How many new vehicles in the following categories does your company expect to purchase or lease during the 1988 model year?

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank / Financial	Other	Total	% of Total
U.S.												
Subcompact	1	1,800	45	0	50	0	846	186	26	49	3,003	3.0%
Compact	5,398	273	941	344	4,015	265	1,302	1,973	569	1,823	16,903	16.0%
Mid-size	5,434	9,250	3,426	3,379	15,461	2,582	328	2,158	1,920	3,130	47,068	44.0%
Large	221	839	369	153	456	1,343	93	6,126	657	1,435	11,692	11.0%
Mini-vans	58	575	275	506	3,455	239	787	203	55	1,240	7,393	7.0%
Light trucks	39	327	331	1,182	3,544	2,997	4,215	2,914	19	5,267	20,835	19.0%
Total	11,151	13,064	5,387	5,564	26,981	7,426	7,517	13,560	3,246	12,944	106,894	
Canada												
Subcompact	0	0	6	0	0	0	5	14	0	0	25	1.0%
Compact	213	209	27	0	100	67	10	23	0	80	729	10.0%
Mid-size	42	990	296	25	555	453	10	51	0	360	2,782	38.0%
Large	12	84	45	5	235	126	0	154	0	9	670	9.0%
Mini-vans	0	73	106	80	79	88	45	1,155	0	342	1,968	27.0%
Light trucks	0	25	26	0	71	545	30	395	0	36	1,128	15.0%
Total	267	1,381	506	110	1,040	1,279	100	1,792	0	827	7,302	

What percent of the 1987 model year vehicles you purchased were purchased under a fleet incentive program?

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank / Financial	Other	Total	
U.S.												
Mean	85.6	79.4	88.1	90.8	80.8	80.1	80.4	93.1	78.7	80.9	83.8	
Median	100.0	92.0	95.0	100.0	96.0	92.0	95.0	100.0	96.5	95.0	96.2	
Canada												
Mean	99.0	65.5	77.9	100.0	90.3	85.0	0	100.0	0	71.0	86.1	
Median	99.0	67.5	80.0	100.0	97.5	90.0	0	100.0	0	95.0	91.1	

Note: The mean is computed by adding all responses and dividing the sum by the total number of responses. The median is that number which, when the numbers are placed in order from lowest to highest, has 50 percent of responses above and below it.

Please indicate whether you are responsible for purchasing the following and if so, how many you plan to purchase in the 1988 model year.

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank / Financial	Other	Total	% of Total
U.S.												
Corporate vehicles assigned to executives												
Yes	25	11	17	13	26	11	22	19	9	33	186	67%
No	13	14	5	7	16	5	5	13	0	13	91	33%
#	175	52	235	96	319	219	134	421	566	674	2,889	
Executive car pools												
Yes	13	7	7	4	6	4	15	13	7	16	92	39%
No	21	16	12	11	30	9	10	16	1	21	147	61%
#	47	17	37	28	21	59	92	87	86	220	694	
Personally-owned cars for corporate executives												
Yes	5	3	6	2	7	1	0	0	0	7	31	14%
No	29	20	12	14	27	12	19	24	6	29	192	86%
#	0	4	8	2	1,310	0	0	0	0	84	1,408	
Canada												
Corporate vehicles assigned to executives												
Yes	2	9	6	0	7	7	1	2	0	5	39	78%
No	1	3	1	1	1	0	0	2	0	2	11	12%
#	31	41	35	0	10	21	0	1	0	42	181	
Executive car pools												
Yes	1	2	1	1	0	4	1	1	0	0	11	31%
No	1	7	5	0	3	2	0	2	0	4	24	69%
#	6	4	0	3	0	0	10	12	0	0	35	
Personally-owned cars for corporate executives												
Yes	0	2	0	0	0	1	0	0	0	0	3	10%
No	1	6	5	1	3	5	0	2	0	4	27	90%
#	0	2	0	0	0	0	0	0	0	0	2	

Are your operators allowed a choice of any of the following?

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank / Financial	Other	Total	% of Total
U.S.												
Make of car	21	25	15	13	33	14	5	1	6	30	163	51%
Model of car	12	18	6	12	24	4	3	1	6	19	105	33%
Engine-type	2	4	1	3	6	3	1	2	4	9	35	11%
Canada												
Make of car	2	12	6	0	6	7	0	1	0	6	40	69%
Model of car	1	10	3	0	3	1	0	0	0	6	24	41%
Engine-type	0	6	2	0	2	2	0	0	0	2	14	24%

Note: If you are interested in seeing the number of fleets making certain options available to operators as standard equipment or at a specific additional cost in large, mid-size, compact and subcompact cars, please write to NAFA. We will be happy to supply you with results which are too lengthy to publish.

(Continued on page 16)

NAFA's New Car Acquisition Survey

(Continued from page 13)

Do you anticipate any substantial changes in your fleet operations next year?

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank / Financial	Other	Total	% of Total
U.S.												
Likely to lease cars we previously would have purchased	9	2	2	2	2	2	4	2	1	5	31	10%
Likely to keep vehicles longer and for more mileage than before	2	1	5	2	1	2	7	13	0	11	44	14%
Likely to reduce the number of vehicles in our fleet	5	1	2	3	9	2	10	8	0	6	46	14%
Likely to divest most of our fleet and switch to employee ownership	1	0	1	1	1	0	2	0	0	4	10	3%
No substantial changes anticipated; none of the above apply to me	23	23	16	14	32	13	17	24	10	29	201	63%
Canada												
Likely to lease cars we previously would have purchased	0	1	1	0	0	0	0	0	0	1	3	5%
Likely to keep vehicles longer and for more mileage than before	0	0	0	0	0	1	0	4	0	0	5	9%
Likely to reduce the number of vehicles in our fleet	1	0	0	0	0	0	0	1	0	1	3	5%
Likely to divest most of our fleet and switch to employee ownership	0	0	0	0	0	1	0	0	0	0	1	2%
No substantial changes anticipated; none of the above apply to me	2	12	6	1	9	6	1	1	0	7	45	78%

Do you plan to change the size of the cars in your fleet over the next year?

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank / Financial	Other	Total	% of Total
U.S.												
Yes	6	1	1	0	3	2	3	5	1	1	23	7%
No	33	27	23	22	42	15	26	39	10	50	287	93%
Canada												
Yes	0	0	2	0	0	0	0	1	0	2	5	9%
No	3	14	5	1	9	8	1	5	0	7	53	91%

How many of your cars are imports, built outside North America?

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank/ Financial	Other	Total	% of Total
U.S.	4	37	17	52	2,003	1	138	104	21	145	2,522	0.7%
Canada	8	30	32	0	16	8	0	1	0	164	259	1.3%

Please indicate the number of imports purchased from the model year 1987 and the number you expect to purchase in the 1988 model year.

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank/ Financial	Other	Total	% of Total
U.S.												
1987 Model Year	1	13	8	16	31	10	3	22	112	61	277	0.6%
1988 Model Year	2	8	82	20	245	10	0	25	118	40	550	0.5%
Canada												
1987 Model Year	6	30	12	0	13	7	170	0	0	31	269	*
1988 Model Year	3	28	13	0	21	5	100	0	0	25	195	2.7%

*Canadian total vehicles not computed in this survey.

Expected Import Purchases 1986-1988 Model Years

Group	Model Year 1986	1987	1988
Banking/Financial	25	30	118
Public Utility	250	200	100
Chemical & Petroleum	5	6	15
Food & Beverage	48	38	95
Consumer Manufacturing	84	25	20
Drugs & Cosmetics	277	310	36
Government	0	0	25
Insurance	7	379	5
Industrial Manufacturing	15	29	266
Other	295	333	65
TOTALS	**1,006**	**1,350**	**745**

Fleets responding to this year's survey claim 2,781 of their vehicles are imports built outside North America. This represents 0.7 percent of all vehicles in this survey; last year this figure was 1.4 percent.

To find out what are the most important factors in vehicle selection, turn the page.

Vehicle Selection:

Initial Cost Continues as Top Factor

For the fourth consecutive year, a vehicle's initial cost is the most important factor fleet managers take into consideration when choosing vehicles for their fleets, according to NAFA's 1987 New Car Acquisition Survey results.

Initial cost was the number one factor in both the United States and Canada and, in fact, the two countries rated six other criteria in almost identical order.

Second most important for both nations was a vehicle's serviceability and ease of maintenance; third, economy of operation; fourth, depreciation/resale value/holding cost, and fifth, fringe benefit/driver satisfaction. Only when rating the administrative ease and company prestige of a vehicle did the countries differ. U.S. respondents rated administrative ease sixth and company prestige seventh; Canadians had these reversed.

Last year these factors were rated in order of most important to least as 1) initial cost, 2) depreciation/resale value/holding cost, 3) economy of operation, 4) serviceability/ease of maintenance, 5) fringe benefit/driver satisfaction, 6) company prestige and 7) administrative ease.

Further, this year's results show initial cost was the number one factor considered by nine of ten U.S. fleet classifications (chemical and petroleum fleets rated it number two) and nine of ten Canadian fleet classifications (consumer manufacturing fleets rated it fourth.)

Rate the importance of the following factors when selecting new model year vehicles for your fleet. Scale: 1 = most important, 3 = moderately important, 7 = not at all or least important.

	Insurance	Drugs & Cosmetics	Food & Beverage	Consumer Manuf.	Industrial Manuf.	Chemical & Petroleum	Public Utility	Government	Bank/ Financial	Other	Total
U.S.											
Initial Cost	1	1	1	1	1	2	1	1	1	1	1
Serviceability/Maint.	3	4	3	3	3	1	2	2	2	2	2
Economy of Operation	4	3	4	4	4	3	3	3	3	3	3
Depreciation/ Resale Value/ Holding Cost	2	2	2	2	2	4	6	4	4	4	4
Fringe Benefit/ Driver Satis.	5	6	5	5	5	5	4	6	6	5	5
Admin. Ease	7	7	6	7	7	7	5	5	7	7	6
Company Prestige	6	5	7	6	6	6	7	7	5	6	7
Canada											
Initial Cost	1	1	1	4	1	1	1	1		1	1
Serviceability/Maint.	2	2	4	2	3	3	3	2	NO	3	2
Economy of Operation	3	3	2	3	4	4	2	3	RESPONSES	7	3
Depreciation/ Resale Value/ Holding Cost	4	4	5	5	2	2	4	5		4	4
Fringe Benefit/ Driver Satis.	5	5	3	6	5	6	5	6		2	5
Company Prestige	6	6	7	1	6	5	6	7		5	6
Admin. Ease	7	7	6	7	7	7	7	4		6	7

EPA's 1988 Estimated Gas Mileage Figures

MPG Cty	MPG Hwy	Make	Trans-mission	CID	Cyl.
		Sub-Compact Cars			
44	49	Pontiac Firefly	M5	61	3
44	49	Suzuki Forsa	M5	61	3
44	49	Chevy Sprint	M5	61	3
39	43	Ford Festiva	M5	81	4
38	40	Ford Festiva	M4	81	4
38	40	Pontiac Firefly	A3	61	3
38	40	Suzuki Forsa	A3	61	3
38	40	Chevy Sprint	A3	61	3
37	41	Isuzu I-Mark	M5	90	4
37	41	Chevy Spectrum	M5	90	4
37	41	Pontiac Sunburst	M5	90	4
37	39	Subaru Justy	M5	73	3
35	41	Toyota Tercel EZ	M4	89	4
35	38	Honda Civic	M4	91	4
34	38	Dodge Colt	M4	90	4
34	38	Plymouth Colt	M4	90	4
34	38	Mitsubishi Mirage	M4	90	4
33	39	Isuzu I-Mark	M5	90	4
33	37	Honda Civic	M5	91	4
32	37	Dodge Colt	M5	90	4
32	37	Plymouth Colt	M5	90	4
32	37	Mitsubishi Mirage	M5	90	4
31	37	Toyota Tercel	M5	89	4
31	35	Toyota Tercel	M4	89	4
31	33	Isuzu I-Mark	A3	90	4
31	33	Chevy Spectrum	A3	90	4
31	33	Pontiac Sunburst	A3	90	4
30	37	Toyota Corolla FX	M5	97	4
30	35	Toyota Corolla	M5	97	4
30	34	Mercedes-Benz	A4	152	5
30	32	Dodge Colt	L3	90	4
30	32	Plymouth Colt	L3	90	4
29	36	Nissan Sentra Coupe	M5	98	4
29	35	Honda Civic	L4	91	4
29	32	Mitsubishi Mirage	L3	90	4
28	37	Hyundai Excel	M5	90	4
28	37	Mitsubishi Precis	M5	90	4
28	36	Isuzu I-Mark	M5	90	4
28	36	Chevy Spectrum Turbo	M5	90	4
28	33	Toyota Tercel	L3	89	4
28	31	Yugo GV	M4	68	4
27	34	Toyota Corolla	L4	97	4
27	33	Hyundai Excel	M4	90	4
27	33	Mitsubishi Precis	M4	90	4
27	32	Yugo GV	M5	79	4
27	31	Hyundai Excel	L3	90	4
27	31	Mitsubishi Precis	L3	90	4
27	31	Toyota Corolla FX	L3	97	4
27	30	Toyota Corolla	L3	97	4
26	34	Nissan Pulsar NX	M5	98	4
26	32	Toyota Celica	M5	122	4
26	31	Subaru Hatchback	M5	109	4
26	29	Nissan Sentra Coupe	L3	98	4
25	34	Pontiac Sunbird Conv.	M5	122	4
25	32	Toyota Celica	L4	122	4
25	32	Subaru XT	M5	109	4
25	31	Dodge Colt	M5	98	4
25	31	Plymouth Colt	M5	98	4
25	31	Mitsubishi Mirage	M5	98	4
25	30	Volkswagen Fox	M4	109	4
25	30	Ford Mustang	M5	140	4
25	30	Nissan Pulsar NX	L3	98	4
25	29	Toyota Corolla	M5	97	4
25	29	Toyota Corolla FX	M5	97	4
24	31	Mitsubishi Cordia	M5	122	4
24	31	Subaru XT	L4	109	4
24	31	Mitsubishi Tredia	M5	122	4
24	28	Subaru XT 4WD	M5	109	4
24	26	Dodge Colt	L3	98	4
24	26	Plymouth Colt	L3	98	4
24	26	Mitsubishi Mirage	L3	98	4
23	31	Pontiac Sunbird Conv.	L3	122	4
23	29	Toyota Corolla FX	L4	97	4
23	29	Nissan Pulsar NX	M5	110	4
23	28	Dodge Daytona	L3	152	4
23	28	Chrys. Lebaron Conv	L3	152	4
23	28	Nissan 200SX	M5	120	4
23	27	Honda Prelude	M5	119	4
23	27	Audi 80/90	A3	121	4
23	27	Honda Prelude	M5	119	4
23	25	Mitsubishi Cordia	L3	122	4
23	25	Subaru Hatchback	L3	109	4
23	25	Mitsubishi Tredia	L3	122	4
22	31	Dodge Daytona	M5	152	4
22	31	Chrys Lebaron Conv	M5	152	4
22	30	Audi 80/90	M5	121	4
22	28	Toyota Celica	L4	122	4
22	28	Toyota Celica	M5	122	4
22	28	Mitsubishi Cordia	M5	110	4
22	28	VW Scirocco 16V	M5	109	4
22	28	Mitsubishi Tredia	M5	110	4
22	28	Nissan 200SX	L4	120	4
21	29	Dodge Daytona	M5	135	4
21	29	Chrys Lebaron Conv	M5	135	4
21	29	Mercedes-Benz 190E2.3	M5	140	4
21	28	Nissan Pulsar NX	L4	110	4
21	27	Ford Mustang	L4	140	4
21	27	Isuzu Impulse	M5	121	4
21	27	Honda Prelude	L4	119	4
21	27	Saab 900 Conv	M5	121	4
21	24	Mercedes-Benz 190E2.3	A4	140	4
20	30	Pontiac Sunbird Conv	M5	121	4
20	29	Chevy Cavalier Conv	M5	173	6
20	28	Subaru XT	L4	163	6
20	27	Chevy Cavalier Conv	L3	173	6
20	27	Pontiac Sunbird Conv	L3	121	4
20	26	Isuzu Impulse	L4	121	4
20	26	Isuzu Impulse	L4	138	4
20	26	Isuzu Impulse	M5	138	4
20	26	Honda Prelude	L4	119	4
20	25	Dodge Daytona	A3	135	4
20	25	Chrysler LeBaron Conv	A3	135	4
20	25	Audi 80/90	M5	141	5
20	23	Mercedes-Benz 190E2.6	A4	159	6
20	22	Saab 900 Conv	A3	121	4
19	27	Chevy Camaro	L4	173	6
19	27	Pontiac Firebird/ Trans AM	L4	173	6
19	26	Toyota Celica	M5	122	4
19	26	Nissan 200 SX	M5	181	6
19	25	Subaru XT 4WD	L4	163	6
18	27	Ford Mustang	L4	302	8

MPG Cty	MPG Hwy	Make	Trans-mission	CID	Cyl.
18	26	Mercedes-Benz 190E2.6	M5	159	6
18	26	Nissan 300ZX 2+2	L4	181	6
18	25	Subaru XT 4WD	M5	163	6
18	25	Nissan 200SX	L4	181	6
18	25	Alfa Romeo Milano	M5	182	6
18	24	Chrys Conquest	L4	156	4
18	24	Alfa Romeo Milano	M5	152	6
18	24	Mitsubishi Starion	L4	156	4
18	24	Audi 80/90 Quattro	M5	141	5
18	23	Toyota Supra	L4	180	6
18	23	Toyota Supra	M5	180	6
18	22	Chrysler Conquest	M5	156	4
18	22	Mitsubishi Starion	M5	156	4
18	22	Alfa Romeo Milano	A3	152	6
17	29	BMW 3-Series	M5	140	4
17	27	Chevy Camaro	M5	173	6
17	27	Pontiac Firebird/ Trans AM	M5	173	6
17	26	Chevy Camaro	L4	305	8
17	26	Pontiac Firebird/ Trans AM	L4	305	8
17	25	Nissan 300ZX 2+2	M5	181	6
17	25	Chevy Camaro	L4	305	8
17	22	Mercedes-Benz 300CE	A4	181	6
16	26	Chevy Camaro	M5	305	8
16	26	Pontiac Firebird/ Trans AM	M5	305	8
16	25	Chevy Camaro	L4	350	8
16	25	Chevy Camaro	M5	305	8
16	25	Pontiac Firebird/ Trans AM	L4	350	8
16	25	Pontiac Firebird/ Trans AM	M5	305	8
16	24	Pontiac Firebird/ Trans AM	L4	305	8
16	24	Ford Mustang	M5	302	8
15	20	BMW 6-Series	M5	209	6
14	18	BMW 6-Series	L4	209	6
		Compact Cars			
33	42	Ford Escort	M4	113	4
31	40	Pontiac Lemans	M5	98	4
30	39	Pontiac Lemans	M4	98	4
30	37	Chevy Nova	M5	97	4
29	36	Nissan Sentra	M5	98	4
29	35	Nissan Sentra	M4	98	4
28	37	Ford Escort	M5	113	4
28	35	Lincoln/Mercury Tracer	M5	97	4
28	33	Mazda 323	M5	98	4
27	38	Oldsmobile Firenza	M5	122	4
27	38	Buick Skyhawk	M5	122	4
27	38	Pontiac Sunbird	M5	122	4
27	34	Honda Accord	M5	119	4
27	32	Pontiac Lemans	L3	98	4
27	31	Chevy Nova	L3	97	4
26	34	Ford Escort	M5	113	4
26	32	Toyota Camry	M5	122	4
26	32	Oldsmobile Firenza	L3	122	4
26	32	Buick Skyhawk	L3	122	4
26	32	Pontiac Sunbird	L3	122	4
26	30	Ford Laser	M4	98	4
26	30	Mazda 323	M4	98	4
26	29	Nissan Sentra	L3	98	4
25	36	Chevy Cavalier	M5	121	4
25	36	Olds Cutlass Calais	M5	138	4
25	36	Oldsmobile Firenza	M5	121	4
25	36	Pontiac Grand AM	M5	138	4
25	36	Buick Skyhawk	M5	121	4
25	35	Chevy Beretta	M5	121	4
25	35	Chevy Corsica	M5	121	4
25	34	Plymouth Horizon	M5	135	4
25	34	Dodge Omni	M5	135	4
25	34	Volkswagen Jetta	M5	109	4
25	33	Volkswagen Golf	M5	109	4
25	33	Dodge Shadow	M5	135	4
25	33	Plymouth Sundance	M5	135	4
25	32	Toyota Camry	L4	122	4
25	32	Chevy Cavalier	L3	121	4
25	32	Oldsmobile Firenza	L3	121	4
25	32	Buick Skyhawk	L3	121	4
25	32	Subaru Sedan 3-dr.	M5	109	4
25	30	Honda Accord	M5	119	4
25	30	Toyota Camry	L4	122	4
25	30	Plymouth Horizon	L3	135	4
25	30	Dodge Omni	L3	135	4
25	29	Chevy Nova	M5	97	4
25	29	Lincoln-Merc Tracer	A3	97	4
25	27	Subaru Sedan 3-dr.	L3	109	4
24	34	Olds Cutlass Calais	L3	138	4
24	34	Pontiac Grand AM	L3	138	4
24	34	Buick Skylark	L3	138	4
24	31	Chevy Beretta	L3	121	4
24	31	Chevy Corsica	L3	121	4
24	30	Ford Escort	A3	113	4
24	30	Honda Accord	L4	119	4
24	30	Ford Laser	L4	98	4
24	30	Mazda 323	L4	98	4
24	29	Dodge Shadow	L3	135	4
24	28	Chevy Nova	L4	97	4
23	33	Olds Cutlass Calais	M5	151	4
23	33	Pontiac Grand AM	M5	151	4
23	33	Buick Skylark	M5	151	4
23	31	Olds Cutlass Calais	L3	151	4
23	31	Pontiac Grand AM	L3	151	4
23	31	Dodge Shadow	M5	152	4
23	31	Buick Skylark	L3	151	4
23	31	Plymouth Sundance	M5	152	4
23	29	Honda Accord	L4	119	4
23	28	Volkswagen Golf	A3	109	4
23	28	Volkswagen Jetta	A3	109	4
23	28	Chrysler Lebaron	L3	135	4
23	28	Chrysler Lebaron	L3	152	4
23	28	Dodge Shadow	L3	152	4
23	28	Plymouth Sundance	L3	152	4
23	28	Plymouth Sundance	L3	135	4
22	31	Chrysler Lebaron	M5	152	4
22	29	Volkswagen GTI 16V	M5	109	4
22	29	Volkswagen Jetta GLI 16V	M5	109	4
22	28	Nissan Stanza	M5	120	4
22	27	Toyota Camry	M5	122	4
22	27	Mazda 323	M5	98	4
22	27	SAAB 900	M5	121	4
22	27	Ford Tempo	A3	140	4
22	27	Linc-Merc Topaz	A3	140	4
22	27	Volvo 240 DL/240 GL	M5	141	4
22	24	Subaru Sedan 3-dr.	A3	109	4
21	31	Pontiac Sunbird	M5	121	4
21	29	Chrysler Lebaron	M5	135	4
21	29	Dodge Shadow	M5	135	4
21	29	Plymouth Sundance	M5	135	4
21	27	Linc-Merc Cougar	L4	231	6
21	27	SAAB 900	M5	121	4
21	27	Nissan Stanza	L4	120	4
21	27	Subaru Sedan 3-door	L4	109	4
21	27	Ford Thunderbird	L4	231	6
21	25	Subaru Sedan 3-door	M5	109	4
21	24	Mazda 323	M5	98	4
20	30	Pontiac Grand AM	M5	121	4
20	29	Chevy Cavalier	M5	173	6
20	29	Cadillac Cimarron	M5	173	6
20	27	Chevy Cavalier	L3	173	6
20	27	Cadillac Cimarron	L3	173	6
20	27	Pontiac Grand AM	L3	121	4
20	27	Pontiac Sunbird	L3	121	4
20	26	Chevy Beretta	L3	173	6

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MPG Cty	MPG Hwy	Make	Trans-mission	CID	Cyl.
20	26	Chevy Corsica	L3	173	6
20	25	Chrysler Lebaron	A3	135	4
20	25	Dodge Shadow	A3	135	4
20	25	Plymouth Sundance	A3	135	4
20	25	Merkur XR41 i	M5	140	4
20	24	Volvo 240 DL/240 GL	A4	141	4
20	24	Mercedes-Benz 260E	A4	159	6
20	23	SAAB 900	A3	121	4
19	29	Chevy Beretta	M5	173	6
19	29	Chevy Corsica	M5	173	6
19	27	Olds Cutlass Calais	L3	181	6
19	27	Buick Skylark	L3	181	6
19	25	BMW 5-Series	M5	164	6
19	24	Austin Rover Sterling	M5	152	6
19	24	Acura Legend	M5	163	6
19	24	Volkswagen Quantum	M5	136	5
19	23	BMW 5-Series	L4	164	6
19	22	Peugeot 505 Sedan	L4	132	4
19	22	SAAB 900	A3	121	4
19	21	SAAB 900	A3	121	4
18	27	Ford Thunderbird	L4	302	8
18	27	Ford Thunderbird	M5	140	4
18	26	Nissan Maxima	M5	181	6
18	26	Mercedes-Benz 260E	M5	159	6
18	25	Lincoln-Mercury Cougar	L4	302	8
18	25	Jaguar XJ6	L4	219	6
18	24	Toyota Cressida	L4	168	6
18	24	Nissan Maxima	L4	181	6
18	24	Peugeot 505 Sedan	M5	131	4
18	23	Austin Rover Sterling	L4	152	6
18	23	Acura Legend	L4	163	6
18	23	Peugeot 505 Sedan	M5	132	4
18	22	Mitsubishi Galant Sigma	A4	181	6
18	22	Volkswagen Quantum	A3	136	5
18	22	Peugeot 505 Sedan	L4	174	6
18	22	Peugeot 505 Sedan	L4	131	4
18	22	Peugeot 505 Sedan	M5	174	6
18	21	Merkur XR4Ti	A3	140	4
17	25	Mercedes-Benz 300E	M5	181	6
17	24	Mitsubishi Galant Sigma	M5	181	6
17	24	Jaguar XJ6	L4	219	6
17	23	Ford Thunderbird	L4	140	4
17	22	Mercedes-Benz 300E	A4	181	6
17	20	Volvo 780	A4	174	6
16	21	BMW 5-Series	L4	209	6
15	21	BMW 5-Series	M5	209	6
13	16	Mercedes-Benz 560SEL	A4	338	8
10	19	BMW 5-Series	M5	211	6
		Mid-Size Cars			
25	34	Dodge Lancer	M5	135	4
25	34	Chrysler LeBaron GTS	M5	135	4
25	33	Dodge Aries	M5	135	4
25	33	Plymouth Reliant	M5	135	4
25	33	Eagle Renault Medallion Sedan	M5	132	4
25	30	Dodge Aries	L3	135	4
25	30	Plymouth Reliant	L3	135	4
24	31	Chevy Celebrity	L3	151	4
24	31	Buick Century	L3	151	4
24	31	Olds Cutlass Ciera	L3	151	4
24	31	Mazda 626/MX-6	M5	133	4
24	31	Pontiac 6000	L3	151	4
23	32	Ford Taurus	M5	152	4
23	28	Plymouth Caravelle	L3	135	4
23	28	Plymouth Caravelle	L3	152	4
23	28	Dodge Dynasty	L3	152	4
23	28	Dodge Lancer	L3	152	4
23	28	Dodge Lancer	L3	135	4
23	28	Chrysler LeBaron GTS	L3	135	4
23	28	Chrysler LeBaron GTS	L3	152	4
23	28	Dodge 600	L3	152	4
23	28	Dodge 600	L3	135	4
23	27	Dodge Aries	L3	152	4
23	27	Plymouth Reliant	L3	152	4
22	31	Dodge Lancer	M5	152	4
22	31	Chrysler LeBaron GTS	M5	152	4
22	28	Mazda 626/MX-6	L4	133	4
22	27	Volvo 740/760	M5	141	4
21	29	Chevy Celebrity	L4	173	6
21	29	Buick Century	L4	173	6
21	29	Olds Cutlass Ciera	L4	173	6
21	29	Dodge Lancer	M5	135	4
21	29	Chrysler LeBaron GTS	M5	135	4
21	29	Lincoln-Mercury Sable	L4	182	6
21	29	Ford Taurus	L4	182	6
21	28	Mazda 626/MX-6	M5	133	4
21	26	Ford Taurus	A3	152	4
21	26	Volvo 740/760	L4	141	4
20	29	Chevy Celebrity	M5	173	6
20	29	Olds Cutlass Supreme	L4	173	6
20	29	Pontiac Grand Prix	L4	173	6
20	29	Buick Regal	L4	173	6
20	29	Pontiac 6000	L4	173	6
20	29	Pontiac 6000	M5	173	6
20	27	Chevy Celebrity	L3	173	6
20	27	Buick Century	L3	173	6
20	27	Olds Cutlass Ciera	L3	173	6
20	27	Pontiac 6000	L3	173	6
20	26	Eagle Renault Medallion Sedan	A3	132	4
20	25	Plymouth Caravelle	A3	135	4
20	25	Dodge Lancer	A3	135	4
20	25	Chrysler LeBaron GTS	A3	135	4
20	25	Chrysler New Yorker Turbo	A3	135	4
20	25	Audi 5000S	M5	141	5
20	25	Dodge 600	A3	135	4
20	25	Volvo 740/760	M4	141	4
19	29	Buick Century	L4	231	6
19	29	Olds Cutlass Ciera	L4	231	6
19	29	Buick Riviera	L4	231	6
19	29	Oldsmobile Toronado	L4	231	6
19	28	Oldsmobile Cutlass Supreme	M5	173	6
19	28	Pontiac Grand Prix	M5	173	6
19	27	Chevy Monte Carlo	L4	262	6
19	26	Dodge Dynasty	L3	181	6
19	26	Chrysler New Yorker/ 5th Avenue	L3	181	6
19	25	Mazda 626/MX-6	L4	133	4
19	23	Mazda 929	L4	180	6
19	23	Audi 5000S	A3	141	5
19	22	Volvo 740/760	A4	141	4
18	26	Audi 5000CS Turbo	M5	136	5
18	25	Olds Cutlass Supreme Classic	L4	307	8
18	24	Mazda 929	M5	180	6
18	24	Audi 5000S Quattro	M5	141	5
18	22	Audi 5000CS Turbo	A3	136	5
17	25	Audi 5000CS Quattro	M5	136	5
17	24	Linc-Merc Mark VII	L4	302	8
17	24	Cadillac Eldorado	L4	275	8
17	24	Chevy Monte Carlo	L4	305	8
17	24	Cadillac Seville	L4	275	8
17	23	Dodge Diplomat	L3	318	8
17	23	Plymouth Gran Fury	L3	318	8
17	23	Chrys Newport/Fifth Ave	L3	318	8
17	23	Merkur Scorpio	M5	179	6
17	23	Merkur Scorpio	L4	179	6
17	20	Volvo 740/760	A4	174	6
17	19	Mercedes-Benz 300SEL	A4	181	6

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MPG Cty	MPG Hwy	Make	Trans-mission	CID	Cyl.
15	22	BMW 7-Series	M5	209	6
15	18	Mercedes-Benz 420SEL	A4	256	8
14	19	BMW 7-Series	L4	209	6
13	16	Mercedes-Benz 560SEL	A4	338	8
9	11	Rolls Royce Bentley Eight/Bentley Mulsan	A3	412	8
9	11	Rolls Royce Silver Spirit/Silver Spur	A3	412	8
		Large Cars			
24	32	Eagle Premier	M5	150	4
22	31	Eagle Premier	L4	150	4
21	27	Saab 9000	M5	121	4
20	28	Saab 9000	M5	121	4
19	29	Pontiac Bonneville	L4	231	6
19	29	Oldsmobile Delta 88	L4	231	6
19	29	Buick Electra	L4	231	6
19	29	Buick LeSabre	L4	231	6
19	29	Olds Ninety-Eight/Touring	L4	231	6
19	27	Chevy Caprice	L4	262	6
19	26	Saab 9000	L4	121	4
18	27	Eagle Premier	L4	182	6
17	24	Cadillac Brougham	L4	307	8
17	24	Linc-Merc Grand Marquis	L4	302	8
17	24	Ford LTD Crown Victoria	L4	302	8
17	24	Saab 9000	L4	121	4
17	24	Linc-Merc Town Car	L4	302	8
17	24	Cadillac Deville	L4	275	8
17	24	Cadillac Fleetwood	L4	275	8
16	24	Chevy Caprice	L4	305	8
9	11	Rolls Royce Silver Spur Limousine	A3	412	8
		Small Station Wagons			
33	42	Ford Escort Wgn	M4	113	4
30	35	Toyota Corolla Wgn	M5	97	4
28	37	Ford Escort Wgn	M5	113	4
28	35	Nissan Sentra Wgn	M5	98	4
28	33	Mazda 323 Wgn	M5*	98	4
27	38	Oldsmobile Firenza Cruiser	M5	122	4
27	38	Buick Skyhawk Wgn	M5	122	4
27	38	Pontiac Sunbird Wgn	M5	122	4
27	30	Toyota Corolla Wgn	L3	97	4
26	32	Toyota Camry Wgn	M5	122	4
26	32	Oldsmobile Firenza Cruiser	L3	122	4
26	32	Pontiac Sunbird Wgn	L3	122	4
26	30	Toyota Tercel Wgn	M5	89	4
26	28	Nissan Sentra Wgn	L3	98	4
25	36	Chevy Cavalier Wgn	M5	121	4
25	36	Oldsmobile Firenza Cruiser	M5	121	4
25	36	Buick Skyhawk Wgn	M5	121	4
25	32	Chevy Cavalier Wgn	L3	121	4
25	32	Oldsmobile Firenza Cruiser	L3	121	4
25	32	Buick Skyhawk Wgn	L3	121	4
25	31	Subaru Wgn	M5	109	4
25	30	Toyota Camry Wgn	L4	122	4
25	30	Volkswagen Fox Wgn	M4	109	4
25	29	Nissan Sentra Wgn 4WD	M5	98	4
25	29	Linc-Merc Tracer Wgn	A3	97	4
25	27	Subaru Wgn	L3	109	4
24	31	Buick Skyhawk Wgn	L3	122	4
24	30	Ford Escort Wgn	A3	113	4
24	28	Mazda 323 Wgn	A3	98	4
24	25	Toyota Tercel Wgn	A3	89	4
23	29	Dodge Colt Vista	M5	122	4
23	29	Plymouth Colt Vista	M5	122	4
23	24	Dodge Colt Vista	L3	122	4
23	24	Plymouth Colt Vista	L3	122	4
23	24	Mitsubishi Space Wgn	L3	122	4
22	24	Subaru Wgn	A3	109	4
21	27	Subaru Wgn 4WD Turbo	L4	109	4
21	25	Subaru Wgn 4WD Turbo	M5	109	4
20	29	Chevy Cavalier Wgn	M5	173	6
20	27	Chevy Cavalier Wgn	L3	173	6
19	23	Volkswagen Quantum Wgn	M5	136	5
18	24	Nissan Maxima Wgn	L4	181	6
18	22	Volkswagen Quantum Wgn	A3	136	5
17	21	Volkswagen Quantum Syncro Wgn	M5	136	5
		Mid-Size Station Wagons			
25	34	Plymouth Reliant Wgn	M5	135	4
25	33	Dodge Aries Wgn	M5	135	4
24	33	Eagle Renault Medallion Wgn	M5	132	4
24	31	Chevy Celebrity Wgn	L3	151	4
23	28	Dodge Aries Wgn	L3	152	4
23	28	Dodge Aries Wgn	L3	135	4
23	28	Plymouth Reliant Wgn	L3	152	4
23	28	Plymouth Reliant Wgn	L3	135	4
23	28	Chrys Town & Country Wgn	L3	152	4
22	29	Buick Century Wgn	L3	151	4
22	29	Oldsmobile Cutlass Cruiser	L3	151	4
22	29	Pontiac 6000 Wgn	L3	151	4
22	28	Volvo 240DL/240GL Wgn	M5	141	4
22	28	Volvo 740/760 Wgn	M5	141	4
22	27	Nissan Stanza Wgn 2WD	M5	120	4
21	29	Linc-Merc Sable Wgn	L4	182	6
21	29	Ford Taurus Wgn	L4	182	6
21	26	Volvo 740/760 Wgn	L4	141	4
21	25	Nissan Stanza Wgn 2WD	L4	120	4
20	29	Chevy Celebrity Wgn	L4	173	6
20	29	Buick Centry Wgn	L4	173	6
20	29	Oldsmobile Cutlass Cruiser	L4	173	6
20	29	Pontiac 6000 Wgn	L4	173	6
20	25	Chrysler Town & Country Wgn	A3	135	4
20	25	Volvo 740/760 Wgn	M4	141	4
20	24	Volvo 240 DL/240 GL Wgn	A4	141	4
19	29	Buick Century Wgn	L4	231	6
19	29	Oldsmobile Cutlass Cruiser	L4	231	6
19	28	Chevy Celebrity Wgn	M5	173	6
19	28	Pontiac 6000 Wgn	M5	173	6
19	26	Linc-Merc Sable Wgn V6 A/C	L4	182	6
19	26	Ford Taurus Wgn V6 A/C	L4	182	6
19	24	Eagle Renault Medallion Wgn	A3	132	4
19	22	Peugeot 505 Station Wgn	L4	132	4
19	22	Volvo 740/760 Wgn	A4	141	4
18	24	Audi 5000S Wgn	M5	141	5
18	22	Audi 5000S Wgn	A3	141	5
18	22	Peugeot 505 Station Wgn	L4	131	4
18	22	Peugeot 505 Station Wgn	M5	132	4
17	25	Audi 5000CS Quattro Wgn	M5	136	5
17	20	Mercedes-Benz 300TE	A4	181	6
		Large Station Wagons			
17	24	Chevy Caprice Wgn	L4	307	8
17	24	Oldsmobile Custom Cruiser	L4	307	8
17	24	Lincoln-Mercury Grand Marquis Wgn	L4	302	8
17	24	Buick LeSabre/ Electra Wgn	L4	307	8
17	24	Ford LTD Crown Victoria Wgn	L4	302	8
17	24	Pontiac Safari Wgn	L4	307	8
		Small Pick-Up Trucks			
24	30	Chevy S10 Pickup 2WD	M5	151	4
24	30	GMC S15 Pickup 2WD	M5	151	4
24	28	Ford Ranger Pickup 2WD	M5	140	4

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Michigan State Police Evaluate Police Package Vehicles

Story begins on page 6

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November 1987

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FEATURES

6 **Michigan State Police Evaluate Police Vehicle Packages**
NAFA Associate Editor Phillip Russo attended the annual testing of police vehicles at the Michigan International Speedway and presents a scenario of what he discovered.

8 **Today's Police Vehicles: A Mix of "Brawn and Brains"**
Find out what goes into the Michigan State Police testing procedures in this exclusive interview with the individuals who put it together.

12 **NAFA's Annual Operating Expense Survey**
Have operating costs gone up or down? Find out what your peers are spending on gas, fuel, oil, and tires in this long-awaited survey.

22 **More than 150 Attend Tri-Chapter Meeting**
Members from NAFA's Carolinas, Atlantas, and Sunshine State Chapters met in Myrtle Beach, South Carolina for a two-day fall seminar.

24 **Each One Reach One Attracts 36 New Members**
Here are the names of all the new members that joined NAFA as a result of the Each One Reach One Membership Campaign which ended last month.

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NAFA's Operating Expense Survey:

Fleets Pay 6.61¢ per car per mile

Average operating expenses declined in 1986 after a sharp increase in 1985, according to the results of NAFA's Annual Operating Expense Survey. In 1986, operating expenses totalled 6.61 cents per car per mile; in 1985, the figure was 9.32 cents. Included in the 1986 total were per car per mile average expenses of 4.3 cents for fuel, 0.17 cents for oil, 0.40 cents for tires and tire repairs, and 1.74 cents for repair and maintenance. All these figures decreased from the previous year.

Two major U.S. leasing companies who shared their operating expense figures with NAFA put their totals at: fuel — 4.37 and 4.13 cents; oil — 0.10 and 0.12 cents; tires and tire repairs — 0.31 and 0.33 cents; repair and maintenance 1.42 and 1.58 cents, and total operating expenses — 6.20 and 6.16 cents.

Fleet Demographics

The 1987 Operating Expense Survey garnered responses from 102 United States fleets responsible for 173,240 vehicles, of which 104,746 are company-owned and 68,494 are leased. Publication of this report was delayed to permit a more representative response; this survey represents more fleets and more vehicles than in previous years.

The most prevalent type of vehicle in responding fleets is mid-size cars (77,331), followed by light-duty trucks (36,124) and compact cars (34,948). Responding fleets said they also had 9,600 large cars, 8,599 mini-vans and 4,270 subcompact cars. There were 2,368 vehicles included in the survey that respondents did not classify in any of the above categories.

The mean (total number of vehicles divided by the number of respondents) fleet size of those included in the survey was 1,698, while the median (the number which, when all answers are listed from high to low, has exactly 50 percent above and below it) fleet size was 724. The largest fleet responding had 11,034 vehicles, and the smallest had 30 vehicles.

The average (mean) vehicle in this survey was driven 2,044 miles each month: 1,735 miles for business and 309 for personal use. The median vehicle had 2,019 miles put on it each month; 1,719 for business and 300 for personal use.

Total incidental expenses for 1986 increased slightly more than $5 over 1985 as each component, except parking and tolls and miscellaneous, saw increases. In 1985, incidental expenses totalled $57.63; this year they were $62.65. (One leasing company did not supply NAFA with average incidental expenses and another included several items in their incidental expenses which NAFA does not include, making comparison unrealistic.)

The largest increase in this year's survey was in the standing expenses category. Depreciation reserves increased by nearly $60, interest on money used for payment of owned fleets more than doubled from last year, and depreciation adjustments (a credit) were almost $10 less than last year. Perhaps because additional survey mailings were

Number of Vehicles in Fleets Reporting
United States Fleets
102 Respondents

Company Owned	104,746
Leased	68,494
Total	173,240

Mean Fleet Size	1,698
Median Fleet Size	724
Minimum Fleet Size	30
Maximum Fleet Size	11,034

Composition of Responding U.S. Fleets

Subcompact	Compact	Mid-Size	Large	Trucks	Vans
4,270	34,948	77,331	9,600	36,124	8,599

U.S. vehicle total has 2,368 vehicles unaccounted for.

(Continued on page 16)

Operating Expense Survey

(Continued from page 12)

required, respondents may have filled out the forms based on monthly figures for July or August, when used car sales are slower than normal. With slower sales, fleets get less money for their used vehicles, thus their depreciation adjustments (i.e. credits) are lower and their standing expenses are higher.

All told, standing expenses went from last year's $215.78 to the current $320.72 per car per month. (The two leasing companies' average total standing expenses were $297.32 and $312.47.)

Total credits for personal use and extra equipment decreased from $51.99 in 1985 to $49.39 this year. The leasing companies showed figures of $58.59 and $45.16 for these items.

This year, we converted each cents-per-mile figure into a dollars-per-month total to give you another means of comparison. Similarly, there are now two Net Expense Totals given: the total on page 16 includes operating, incidental and standing expenses, less credits, and is given in both cents/mile and dollars/month; the total on page 20 includes only incidental and standing expenses, less credits, and is given only in dollars/month. This was necessary since fleets can compute their net expenses using either method.

Net expenses, using only incidental and standing expenses, less credits, came to $333.98 per car per month in this survey; last year's survey total was $221.42. When including the operating costs in net expenses, the figure is $466.18 per car per month. By comparison, the leasing companies reported net expenses of $406.85 and $407.97.

This year's report shows expenses for composite fleets, without separate figures for subcompact, compact, mid-size or large vehicles. Composite statistics are the overall fleet expenses regardless of the size of the vehicles in the fleet.

Canadian figures are not given this year. Too few responses were received to be representative.

Average Service Miles Per Car in Survey

	Business	Personal	Total
Mean	1,735	309	2,044
Median	1,719	300	2,019

1986 COMPOSITE FLEET OPERATING COSTS UNITED STATES FLEETS

	Cents/Mile	Dollars/Month*
OPERATING EXPENSES		
Fuel	.0430	$ 86.00
Oil	.0017	3.40
Tires & Tire Repair	.0040	8.00
Repair & Maintenance	.0174	34.80
Total Operating Expenses	.0661	$132.20
INCIDENTAL EXPENSES		
Licenses & Taxes	.0096	$ 19.20
Accident Repairs Less Recoveries	.0072	14.37
Washing	.0049	9.75
Parking & Tolls	.0074	14.76
Miscellaneous	.0023	4.57
Total Incidental Expenses	.0314	$ 62.65
STANDING EXPENSES		
Interest (Company Owned)	.0215	$ 42.98
Leasing Company Service Charge	.0284	56.73
Depreciation Reserve	.1024	204.65
Reconditioning	.0031	6.04
Insurance	.0181	36.07
Less Depreciation Adjustment	(.0129)	(25.75)
Total Standing Expenses	.1606	$320.72
CREDITS		
Personal Use	.0230	$ 45.88
Extra Equipment	.0018	3.51
Total Credits	.0248	$ 49.39
NET EXPENSES (with operating costs) (Operating + Incidental + Standing Expenses - Credits)	.2333	$466.18

* Based on an average of 2,000 miles per car per month

For a comparison of operating costs from 1983 through 1986 turn to page 20.

Operating Expense Survey *(Continued from page 16)*

COMPOSITE FLEET OPERATING COSTS
UNITED STATES FLEETS
1983-1986 COMPARISON

	1983	1984	1985	1986
OPERATING EXPENSES				
(Cents Per Car Per Mile)				
Fuel	.0579	.0560	.0656	.0430
Oil	.0016	.0012	.0036	.0017
Tires & Tire Repair	.0041	.0040	.0048	.0040
Repair & Maintenance	.0157	.0151	.0192	.0174
Total Operating Expenses	.0793	.0763	.0932	.0661
INCIDENTAL EXPENSES				
(Dollars Per Car Per Month)				
Licenses & Taxes	$ 9.95	$ 11.62	$ 16.69	$ 19.20
Accident Repairs Less Recoveries	8.85	8.74	11.59	14.37
Washing	4.12	4.25	5.55	9.75
Parking & Tolls	11.06	7.46	19.10	14.76
Miscellaneous	2.97	3.25	4.70	4.57
Total Incidental Expenses	$36.95	$ 35.32	$ 57.63	$ 62.65
STANDING EXPENSES				
(Dollars Per Car Per Month)				
Interest (Company Owned)	*	*	$ 20.00	$ 42.98
Leasing Company Service Charge	$ 72.05	$ 60.40	46.25	56.73
Depreciation Reserve	153.65	182.95	147.50	204.65
Reconditioning	5.04	11.46	5.00	6.04
Insurance	20.96	19.03	32.03	36.07
Less Depreciation Adjustment	(12.38)	(23.83)	(35.00)	(25.75)
Total Standing Expenses	$239.32	$250.01	$215.78	$320.72

*This figure not computed these years.

CREDITS				
(Dollar Return Per Car Per Month)				
Personal Use	$ 47.70	$ 45.42	$ 44.92	$ 45.88
Extra Equipment	*	*	7.07	3.51
Total Credits	$ 47.70	$ 45.42	$ 51.99	$ 49.39

*This figure not computed these years.

NET EXPENSES (Without Operating Costs)				
(Incidental + Standing Expenses – Credits)				
	$228.77	$239.91	$221.42	$333.98

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NAFA Fleet Executive

The Magazine for Vehicle Management

April 1988

Golden Opportunities: Exploring the Future of Fleet Management

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Annual Personal Use Survey Results page 6

Government Methanol Study Not Optimistic page 44

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The Magazine for Vehicle Management
April 1988

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FEATURES

6 **NAFA's 1988 Personal Use Survey Results**

Find out who is permitted to use a company vehicle for personal use, how much, if anything, they are charged for such use and other vital information on this ever-changing area of fleet management. Our report includes an in-depth look at how much drivers are reimbursed for business use of a personal vehicle.

22 **Golden Opportunities: Exploring the Future of Fleet Management**

NAFA's Annual Conference begins May 1 in beautiful San Francisco, California and this year's program promises to be the most information-packed ever. Here you can learn a little about the background of each person speaking at the conference.

42 **Fleet Fair Is First Event In New Hall; Conference Sell-Out Likely**

NAFA's Fleet Information Fair not only kicks off the Annual Conference, it is also the first major exhibition to be held in the brand new, renovated ballroom of the San Francisco Hilton. With these new facilities and an outstanding schedule of programs, the Conference again promises to be sold out. Don't miss the excitement!

44 **Study Casts Shadow On Methanol Use**

A recent report sponsored by the Department of Energy hinted that in order for methanol to become a viable substitute for gasoline, market conditions will need to be near perfect in every aspect. Here is NAFA's synopsis of the report.

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NAFA's 1988 Personal Use Survey Results

Survey Highlights

- NAFA's 1988 Personal Use Survey respondents were responsible for nearly one-quarter million more vehicles than 1987 respondents.
- Fleet drivers' spouses, licensed children and others are less likely to be able to drive a company vehicle for personal use than last year, while employees themselves have decreased the amount of monthly personal use mileage.
- Nearly 90 percent of responding fleets allow drivers personal use of a company vehicle while more than 80 percent charge drivers for such use.
- Drivers using a personal vehicle for business purposes either because they have no assigned fleet vehicle or their assigned fleet vehicle is inoperable will, in four out of five cases, be reimbursed at a cents-per-mile rate.

NAFA's 1988 Personal Use Survey received 463 responses from fleet managers in the United States and Canada. Government fleet managers were most active in responding with 70 fleets in this industry returning results. Industrial Manufacturing fleets had 61 responses, Insurance fleets 55, and Drugs and Cosmetics 51.

In total, responding fleets were responsible for 518,401 vehicles; 480,126 in the U.S. and 38,275 in Canada. Of the U.S. total, 257,330 vehicles were company-owned and 222,796 were leased; in Canada, 26,187 were company-owned and 12,088 were leased.

Summary of Results

Survey results show 87 percent of U.S. fleet managers and 88 percent of Canadian fleet managers allow their drivers to use company-provided vehicles for personal use. In Canada, 84 percent allow an employee's spouse to use the company vehicle for personal use as well, whereas in U.S., this number is 62 percent. Another difference of opinion between the U.S. and Canada exists in the area of allowing licensed children to drive a company vehicle: in Canada 67 percent allow this; in U.S. only 28 percent of survey respondents do. In accordance with this, 40.6 percent of Canadian fleets have set an average minimum age limit of 20 years for persons other than the employee eligible to drive a company vehicle. Slightly more than 24 percent (24.1) of U.S. fleets have set an average minimum age requirement of 21 years.

Responding U.S. fleets claim drivers put an average of 1,975 miles on a company vehicle each month, while in Canada the number was 2,661 kilometers (1,650 miles). Respectively, these groups said 408 miles and 548 kilometers of their monthly totals were for personal use by drivers. In percentages, therefore, U.S. fleets drive 20.7 percent of their total monthly mileage for personal use, while Canadian fleets drive 20.6 percent of their total kilometers for personal use. Only 15 percent of U.S. fleets and 13 percent of Canadian fleets have set a maximum allowable number of monthly personal miles.

On that note, 75.6 percent of U.S. fleets and 83.6 percent of Canadian fleets allowing personal use of a company vehicle said employees can use the company vehicle for personal use "whenever necessary." Just more than 13 percent (13.2) of U.S. fleets and 3.3 percent of Canadian fleets allow personal use only to and from work; 4.7 percent of U.S. and 1.6 percent of Canadian fleets allow personal use "only while working"; 1.5 percent of U.S. and 3.3 percent of Canadian fleets allow personal use of a company vehicle "only while on vacation"; 1.2 percent of U.S. and 3.3 percent of Canadian fleets allow personal use only on weekends and holidays; and 3.8 percent of U.S. and 4.9 percent of Canadian fleets allow personal use at "other" times.

To cover some of the expenses of allowing drivers to use a company vehicle for personal use, 83.3 percent of U.S. fleets and 68.9 percent of Canadian fleets said they charge drivers for personal use of a company vehicle. In the U.S., 32.5 percent of respondents charge on a cents-per-mile basis; 31.9 percent on a weekly or monthly flat rate basis; 8.6 percent on a combination of both per-mile and flat rate per week or month; 1.2 percent on a graduated scale of cents-per-mile for the first set of miles then a different, usually lower, amount for any miles over that limit. Nearly 26 percent (25.8) of U.S. fleets said they use methods other than those to charge their drivers for personal use of a company vehicle.

In Canada, the most often cited method of charging drivers for personal use of a company vehicle was by flat weekly charges (44.2 percent), while 27.9 percent use a cents-per-kilometer method and 4.7 percent use a combination of both cents-per-kilometer and flat weekly or monthly rates. No Canadian fleets claimed to use the graduated scale method of chargeback and 23.2 percent said they use methods other than those listed on the survey form to charge their drivers for personal use of a company vehicle.

How Much Is Charged?

In the U.S., fleets using the cents-per-mile method when charging drivers for personal use of a company vehicle charge their drivers an average of 17.5 cents per mile; in Canada, this rate was 9.3 cents per kilometer. Those in the U.S. charging drivers each week or month do so at the average rates of $23 each week or $58 each month; for Canada, these rates were $13 and $41 respectively. U.S. fleets using a combination of cents-per-mile and a flat weekly or monthly charge claim an average of 11.5 cents per mile and $40 each month is

(Continued on page 8)

NAFA's '88 Personal Use Survey

(Continued from page 7)

charged to drivers, while in Canada these amounts were 9.0 cents-per-kilometer and $63 each month. No one in Canada uses the graduated scale, but U.S. fleets using this method charge an average of 19.3 cents for the first 7,650 personal miles in a calendar year and 14.3 cents each mile over that.

When collecting these charges, 42 percent of U.S. fleets and 57.5 percent of Canadian fleets use salary deductions. Just more than 38 percent (38.2) of U.S. and 31.9 percent of Canadian fleets have drivers fill out expense reports, while 19.8 percent of U.S. and 10.6 percent of Canadian fleets use "other" methods.

Reimbursement Policies

When an employee uses a personally owned vehicle for business purposes because his/her assigned fleet vehicle is inoperable, 87.2 percent of U.S. fleets and 71.4 percent of Canadian fleets reimburse the driver on a cents-per-mile basis. Average amount reimbursed in the U.S. was 21.4 cents per mile; in Canada, 22.9 cents per kilometer.

When reimbursing drivers for business use of a personal vehicle with no assigned fleet vehicle, the cents-per-mile method is again most used in both countries: 81.6 percent of U.S. fleets and 78.9 percent of Canadian fleets. U.S. fleets pay an average of 21.5 cents per mile, while Canadian fleets pay an average of 23.5 cents per kilometer.

Finally, 94.2 percent of U.S. fleets and 84.1 percent of Canadian fleets said they have not had their personal use policies audited by the Internal Revenue Service, or equivalent governmental body, within the past two years. In real numbers, that means that 23 fleets in the United States and 11 in Canada were audited.

Miscellaneous Facts & Figures

If U.S. drivers have an accident in a company-provided vehicle while they are driving the vehicle for personal use, 71.8 percent of them will not be charged any portion of the repair costs as a result of the accident. This is true for 47.8 percent of drivers in Canada.

Of the 28.2 percent of U.S. drivers charged a portion of accident repair costs incurred as a result of an accident during personal use of a company vehicle, 43.1 percent can expect to pay an average set dollar amount of $197, according to survey results. Slightly more than 41 percent (41.3) pay the insurance policy deductible amount; 12.8 percent pay the full amount of damages, and 2.8 percent pay an average fixed share of 28 percent of the costs.

When Canada's 52.2 percent of drivers who have to pay a portion of accident costs from a 'personal use accident' are charged, more than half (54.3 percent) pay a set dollar amount averaging $184. Nearly 43 percent (42.8) pay the insurance policy deductible amount; 2.9 percent pay the full amount of damages and none pay a fixed share percentage, according to survey results.

For 52.8 percent of U.S. fleets and 56.9 percent of Canadian fleets, drivers are assigned company vehicles as a fringe benefit. For 26.1 percent of U.S. fleets and 15.6 percent of Canadian fleets, a driver's yearly mileage warrants assignment of a company vehicle (averages: 12,843 miles/year; 15,594 km/year). For 11.7 percent of U.S. fleets and 20.2 percent of Canadian fleets, company vehicles are assigned because of the driver's job title. More than nine percent (9.4) of U.S. fleets and 7.3 percent of Canadian fleets use factors other than those listed to determine who is assigned a company vehicle.

For those drivers with an assigned fleet vehicle not in operation, 33.6 percent of U.S. fleets and 27.3 percent of Canadian fleets allow the drivers to use their personal car for business. Thirty-one percent of U.S. and 42 percent of Canadian fleets allow drivers to rent a vehicle in this situation; 27.7 percent of U.S. and 20.7 percent of Canadian fleets permit the driver to use a company "pool" vehicle; 5.5 percent of U.S. and 4.7 percent of Canadian fleets let drivers use the district manager's vehicle, and 2.2 percent of U.S. and 5.3 percent of Canadian fleets authorize "other" means of transportation.

●

For a more in-depth look at NAFA's 1988 Personal Use Survey Results, read the comprehensive industry-by-industry charts on the following pages.

In the Spring of '88
We're Adding 3 Lanes.
(But no parking for lovers!)

Of course, you're going to love our kind of lanes...

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NAFA's 1988 Personal Use Survey
Number of Returns
Industry Classification

	U.S.	Canada	Total
Government	62	8	70
Industrial Manufacturing	52	9	61
Insurance	53	2	55
Drugs and Cosmetics	35	16	51
Consumer Manufacturing	32	8	40
Chemical and Petroleum	23	11	34
Food and Beverage	27	6	33
Public Utility	26	0	26
Banking/Financial	20	1	21
Communications	14	4	18
Service Organization	15	0	15
Electronics	5	1	6
Other	30	3	33
TOTAL	394	69	463

Number and Type of Vehicles in Responding Fleets

United States Fleets			
Company-Owned	257,330		
Leased	222,796		
Total		480,126	
Canadian Fleets			
Company-Owned	26,187		
Leased	12,088		
Total		38,275	518,401
	*****		
Total In Survey			
Company-Owned	283,517		
Leased	234,884		
Total			518,401

Who is allowed to use a company vehicle for personal use?

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg. - Industrial	Mfg. - Consumer	Public Utility	Government	Banking Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
U.S. Employee	35	26	52	23	51	32	17	38	18	11	12	5	21	341	87%	87%
Employee's spouse	34	25	50	15	45	31	5	0	10	4	7	3	16	245	62%	65%
Employee's licensed children	19	13	15	8	19	18	3	0	3	3	1	2	8	112	28%	34%
Others	6	3	1	1	0	1	1	1	0	2	0	0	0	16	4%	5%
No one, personal use not permitted	0	1	0	0	1	0	9	23	2	3	3	0	9	51	13%	13%
Canada Employee	16	6	2	11	9	8	0	2	1	2	0	1	3	61	88%	
Employee's spouse	16	6	2	11	9	8	0	0	1	2	0	0	3	58	84%	
Employee's licensed children	14	5	1	8	9	4	0	0	1	2	0	0	2	46	67%	
Others	3	1	0	3	0	0	0	0	0	0	0	0	0	7	10%	
No one, personal use not permitted	0	0	0	0	0	0	0	6	0	2	0	0	0	8	12%	

What is the total mileage a driver puts on an average company vehicle each month?

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg. - Industrial	Mfg. - Consumer	Public Utility	Government	Banking Financial	Communications	Service Organization	Electronics	Other	Total
U.S. (miles)	2,129	2,076	1,834	2,008	2,219	2,116	1,879	1,830	1,380	1,843	2,203	2,300	2,027	1,975
Canada (km)	2,907	2,779	2,250	2,911	2,090	2,610	0	2,570	300	2,439	0	3,500	3,167	2,661

(Continued on page 12)

NAFA's 1988 Personal Use Survey *(Continued from page 10)*

What is the average personal mileage driven by employees on company vehicles each month?

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total
U.S. (miles)	299	407	318	1,229	388	271	516	227	319	370	417	676	435	408
Canada (km)	460	454	250	594	676	521	0	542	50	729	0	350	1,042	548

Percent of total monthly mileage considered to be used for personal use.

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total
U.S.	14.1%	19.6%	17.3%	61.2%	17.5%	12.8%	27.5%	12.4%	23.1%	20.1%	18.9%	29.4%	21.5%	20.7%
Canada	15.8%	16.3%	11.1%	20.4%	32.3%	20.0%	0	21.1%	16.7%	29.9%	0	10.0%	32.9%	20.6%

Is there a maximum number of monthly personal miles allowed for each driver in a company vehicle?

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
U.S. - Yes	3	2	5	0	3	5	0	38	0	0	2	0	1	59	15%	15%
Limit (Avg.) (miles)	1,000	600	850	—	200	325	—	300	—	—	213	—	372	388		
Canada — Yes	1	1	0	0	0	0	0	7	0	0	0	0	0	9	13%	
Limit (Avg.) (km)	615	8,000	—	—	—	—	—	2,000	—	—	—	—	—	2,513		

Under which conditions are employees permitted personal use of a company vehicle?

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
U.S.																
Whenever necessary	31	25	52	10	50	32	5	4	13	2	12	3	19	258	75.6%	76.8%
Only to and from work	0	0	0	7	0	0	6	22	4	5	0	0	1	45	13.2%	11.7%
Only while working	1	0	0	1	0	0	3	7	0	3	0	0	1	16	4.7%	4.2%
Only weekends & holidays	1	0	0	1	0	0	1	1	0	0	0	0	0	4	1.2%	1.5%
Only while on vacation	1	1	0	1	1	1	0	0	0	0	0	0	0	5	1.5%	1.8%
Other	1	0	0	3	0	0	2	4	0	1	0	2	0	13	3.8%	4.0%
Canada																
Whenever necessary	16	6	2	4	9	7	0	1	0	2	0	1	3	51	83.6%	
Only to and from work	0	0	0	2	0	0	0	0	0	0	0	0	0	2	3.3%	
Only while working	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1.6%	
Only weekends & holidays	0	0	0	1	0	0	0	0	1	0	0	0	0	2	3.3%	
Only while on vacation	0	0	0	2	0	0	0	0	0	0	0	0	0	2	3.3%	
Other	0	0	0	1	0	1	0	1	0	0	0	0	0	3	4.9%	

Is employee charged for personal use of company vehicle?

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
U.S. - Yes	29	25	51	18	49	29	16	18	16	8	9	4	12	284	83.3%	81.1%
No	6	0	1	5	1	3	7	10	3	4	5	1	11	57	16.7%	18.9%
Canada - Yes	15	4	1	5	6	6	0	2	0	1	0	1	1	42	68.9%	
No	1	2	1	6	3	2	0	0	1	1	0	0	2	19	31.1%	

How are employees charged for personal use of a company vehicle? What amount?

United States	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
Per Mile Charge	13	9	23	11	18	10	6	4	3	3	2	0	4	106	32.5%	32.0%
Avg. Amount (cents)	.169	.137	.167	.191	.165	.185	.182	.226	.217	.193	.188	0	.179	.175		
Monthly/Weekly Charge	12	7	18	4	18	11	6	8	7	2	4	1	6	104	31.9%	33.3%
Avg. Amount (dollars)																
Weekly:	25	0	16	11	27	11	14	13	35	22	60	20	12	$23		
Monthly:	49	53	58	43	69	51	60	47	58	0	120	0	98	$58		
Combination of both cents/mile & monthly or weekly charge:	4	2	5	0	7	5	1	0	3	0	0	1	0	28	8.6%	8.1%
Avg. charged per mi.	.070	.105	.100	0	.069	.083	.225	0	.293	0	0	.225	0	.115		
Avg. Month (dollars)	23	10	38	0	43	45	70	0	62	0	0	53	0	$40		
Graduated scale:	0	0	0	1	2	0	0	0	0	0	1	0	0	4	1.2%	1.1%
1. Amt. for 1st number of miles	.000	.000	.000	.225	.130	.000	.000	.000	.000	.000	.225	.000	.000	.193		
2. Number of miles reimbursed at rate in 1.	0	0	0	15,000	300	0	0	0	0	0	15,000	0	0	7,650		
3. Amt. for any mileage over that in 2.	.000	.000	.000	.110	.175	.000	.000	.000	.000	.000	.110	.000	.000	.143		
Other	8	9	8	5	10	6	5	9	6	4	4	3	7	84	25.8%	25.5%
Canada																
Per Kilometer Charge	3	0	0	4	2	2	0	1	0	0	0	0	0	12	27.9%	
Avg. Amount (cents)	.067	.000	.000	.098	.090	.110	.000	.130	.000	.000	.000	.000	.000	.093		
Monthly/Weekly Charge	9	4	0	1	3	2	0	0	0	0	0	0	0	19	44.2%	
Avg. Amount (dollars)																
Weekly:	12	0	0	0	15	0	0	0	0	0	0	0	0	$13		
Monthly:	28	40	0	30	68	58	0	0	0	0	0	0	0	$41		
Combination of both cents/kilometer & monthly or weekly charge:	0	0	0	0	1	0	0	1	0	0	0	0	0	2	4.7%	
Avg. charged per km.	.000	.000	.000	.000	.090	.000	.000	.000	.000	.000	.000	.000	.000	.090		
Avg. Month (dollars)	0	0	0	0	75	0	0	50	0	0	0	0	0	$63		
Graduated scale:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other	3	0	1	0	1	2	0	0	0	1	0	1	1	10	23.2%	

Note: Respondents may have selected more than one response.

If drivers are charged for personal use of a fleet vehicle how are the charges collected?

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
U.S.																
Expense Report	20	9	29	7	25	15	0	1	4	2	3	2	4	121	38.2%	37.4%
Salary Deduction	11	12	23	6	20	12	11	11	7	4	6	2	8	133	42.0%	44.0%
Other	4	6	5	5	8	9	5	6	5	3	3	1	3	63	19.8%	18.6%
Canada																
Expense Report	5	0	1	4	2	3	0	0	0	0	0	0	0	15	31.9%	
Salary Deduction	10	4	1	2	4	4	0	1	0	0	0	0	1	27	57.5%	
Other	1	0	0	1	0	0	0	1	0	1	0	1	0	5	10.6%	

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Reimbursement Policies

***How are employees* reimbursed *for business use of personally owned vehicles when their* assigned fleet vehicle *is inoperable*?**

United States	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
Per Mile (Yes)	33	24	47	20	43	24	22	46	16	10	8	4	24	321	87.2%	85.1%
Amount (cents)	.216	.210	.214	.220	.221	.206	.219	.217	.213	.225	.221	.221	.215	.214		
Monthly/Weekly Payments (Yes)	0	0	0	0	0	0	0	1	0	0	0	0	3	4	1.1%	1.4%
Amount (dollars)																
Weekly:	0	0	0	0	0	0	0	0	0	0	0	0	50	$50		
Monthly:	0	0	0	0	0	0	0	121	0	0	0	0	258	$212		
Combination of both cents/mile & monthly or weekly charge: (Yes)	0	0	1	0	1	0	0	0	0	0	0	1	0	3	0.8%	0.7%
Amount per mile.	.000	.000	.055	.000	.085	.000	.000	.000	.000	.000	.000	.110	.000	.083		
Week/Month (dollars)	0	0	150	0	185	0	0	0	0	0	0	6	0	$114		
Graduated scale: (Yes)	0	0	3	2	6	3	1	1	1	1	0	0	1	19	5.2%	5.2%
1. Amt. for 1st number of miles	.000	.000	.220	.218	.202	.217	.225	.210	.225	.225	.000	.000	.200	.213		
2. Number of miles reimbursed at rate in 1.	0	0	10,400	8,125	5,300	10,200	0	15,000	15,000	15,000	0	0	1,000	8,658		
3. Amt. for any mileage over that in 2.	.000	.000	.110	.110	.110	.107	.110	.110	.110	.155	.000	.000	.130	.113		
Other	1	1	1	0	0	2	1	5	1	1	3	1	4	21	5.7%	7.6%
Canada																
Per Kilometer (Yes)	7	5	1	5	5	7	0	3	0	4	0	1	2	40	71.4%	
Amount (cents)	.231	.228	.220	.226	.234	.224	.000	.240	.000	.234	.000	.210	.230	.229		
Monthly/Weekly Payment	0	0	0	0	0	0	0	0	1	0	0	0	1	2	3.6%	
Amount (dollars)																
Weekly:	0	0	0	0	15	0	0	0	0	0	0	0	0	0		
Monthly:	0	0	0	0	0	0	0	0	425	0	0	0	360	$393		
Combination of both cents/kilometer & monthly or weekly payment: (Yes)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
Graduated scale: (Yes)	0	0	0	1	0	0	0	2	0	0	0	0	0	3	5.4%	
1. Amt. for 1st number of kilometers	.000	.000	.000	.210	.000	.000	.000	.239	.000	.000	.000	.000	.000	.229		
2. Number of kms. reimbursed at rate in 1.	0	0	0	1,500	0	0	0	9,750	0	0	0	0	0	7,000		
3. Amt. for any mileage over that in 2.	.000	.000	.000	.090	.000	.000	.000	.207	.000	.000	.000	.000	.000	.168		
Other	2	1	1	1	3	0	0	1	0	0	0	0	2	11	19.6%	

Has the Internal Revenue (or equivalent governmental body) conducted an audit of your company's personal use policies in the past two years?

	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
U.S. - Yes	3	2	0	1	5	1	3	1	0	1	3	1	2	23	5.8%	7.3%
No	32	25	53	22	47	31	23	61	20	13	12	4	28	371	94.2%	92.7%
Canada - Yes	5	1	0	1	1	1	0	1	0	1	0	0	0	11	15.9%	
No	11	5	2	10	8	7	0	7	1	3	0	1	3	58	84.1%	

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NAFA's 1988 Personal Use Survey *(Continued from page 14)*

How are employees with no assigned fleet *vehicles* reimbursed *for business use of personally owned vehicles?*

United States	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
Per Mile (Yes)	33	23	48	20	39	26	25	51	18	10	9	5	27	334	81.6%	81.3%
Amount (cents)	.216	.211	.214	.219	.212	.212	.222	.217	.224	.224	.200	.220	.213	.215		
Monthly/Weekly Payment (Yes)	1	2	0	0	1	2	0	4	0	4	1	0	4	19	4.7%	4.8%
Amount (dollars)																
Weekly:	0	50	0	0	0	275	0	0	0	80	0	0	66	$107		
Monthly:	400	325	0	0	180	250	0	193	0	302	350	0	258	$264		
Combination of both cents/mile & monthly or weekly payment: (Yes)	1	1	2	0	5	1	0	0	0	1	1	1	0	13	3.2%	3.1%
Amount per mi.	100	070	070	000	076	100	000	000	000	100	110	110	000	085		
Week/Month (dollars)	230	300	213	0	249	250	0	0	0	420	200	6	0	$237		
Graduated scale: (Yes)	0	1	4	2	6	4	1	1	1	3	0	0	2	25	6.1%	6.3%
1. Amt. for 1st number of miles	000	210	216	218	206	219	225	210	225	332	000	000	213	226		
2. Number of miles reimbursed at rate in 1.	0	0	11,550	12,300	13,000	11,400	15,000	15,000	15,000	10,900	0	0	8,000	11,960		
3. Amt. for any mileage over that in 2.	000	000	109	133	112	108	110	110	110	529	000	000	120	179		
Other	2	2	1	1	3	0	0	1	0	1	3	0	4	18	4.4%	4.5%
Canada																
Per Kilometer Charge (Y)	15	6	2	8	6	7	0	3	1	4	0	1	3	56	78.9%	
Amount (cents)	.242	.237	.235	.226	.225	.224	.000	.240	.230	.234	.000	.210	.277	.235		
Monthly/Weekly Payment	1	1	0	0	0	0	0	0	1	0	0	0	1	4	5.6%	
Amount (dollars)																
Weekly:	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Monthly:	400	225	0	0	0	0	0	0	425	0	0	0	360	$353		
Combination of both cents/kilometer & monthly or weekly payments: (Yes)	1	0	0	0	1	0	0	0	0	0	0	0	0	2	2.8%	
Amount per km.	090	000	000	000	080	000	000	000	000	000	000	000	000	085		
Week/Month (dollars)	340	0	0	0	355	0	0	0	0	0	0	0	0	$348		
Graduated scale: (Yes)	0	0	0	2	0	0	0	3	0	0	0	0	0	5	7.1%	
1. Amt. for 1st number of km.	000	000	000	243	000	000	000	251	000	000	000	000	000	247		
2. Number of kms. reimbursed at rate in 1.	0	0	0	4,000	0	0	0	7,833	0	0	0	0	0	6,300		
3. Amt. for any mileage over that in 2.	000	000	000	160	000	000	000	211	000	000	000	000	000	191		
Other	2	0	0	0	1	0	0	0	0	0	0	0	1	4	5.6%	

Factors governing assignment of company-provided vehicle:

United States	Drugs & Cosmetics	Food & Beverage	Insurance	Chemical & Petroleum	Mfg.-Industrial	Mfg.-Consumer	Public Utility	Government	Banking-Financial	Communications	Service Organization	Electronics	Other	Total	% of Country's Total	Overall % U.S. & Canada
Business Mileage	9	8	37	15	24	9	10	14	12	1	5	1	6	151	26.1%	24.4%
Miles per year:	11,286	14,917	12,100	13,818	14,384	10,857	12,875	11,423	13,545	3,600	19,675	1,500	12,333	12,843		
Job Title	7	3	8	3	8	9	4	3	6	1	4	2	10	68	11.7%	13.1%
Fringe Benefit	32	25	39	13	38	28	22	47	16	12	11	5	18	306	52.8%	53.5%
Other:	1	1	1	6	2	0	6	20	3	4	2	0	8	54	9.4%	9.0%
Canada																
Business Mileage	1	0	1	6	1	3	0	1	0	1	0	1	2	17	15.6%	
(Kilometers) per year:	0	0	0	17,322	18,000	18,000	0	20,000	0	3,000	0	0	13,487	15,594		
Job Title	3	3	2	6	4	2	0	0	0	1	0	1	0	22	20.2%	
Fringe Benefit:	16	6	2	10	7	7	0	6	1	3	0	1	3	62	56.9%	
Other:	1	0	0	4	1	1	0	1	0	0	0	0	0	8	7.3%	

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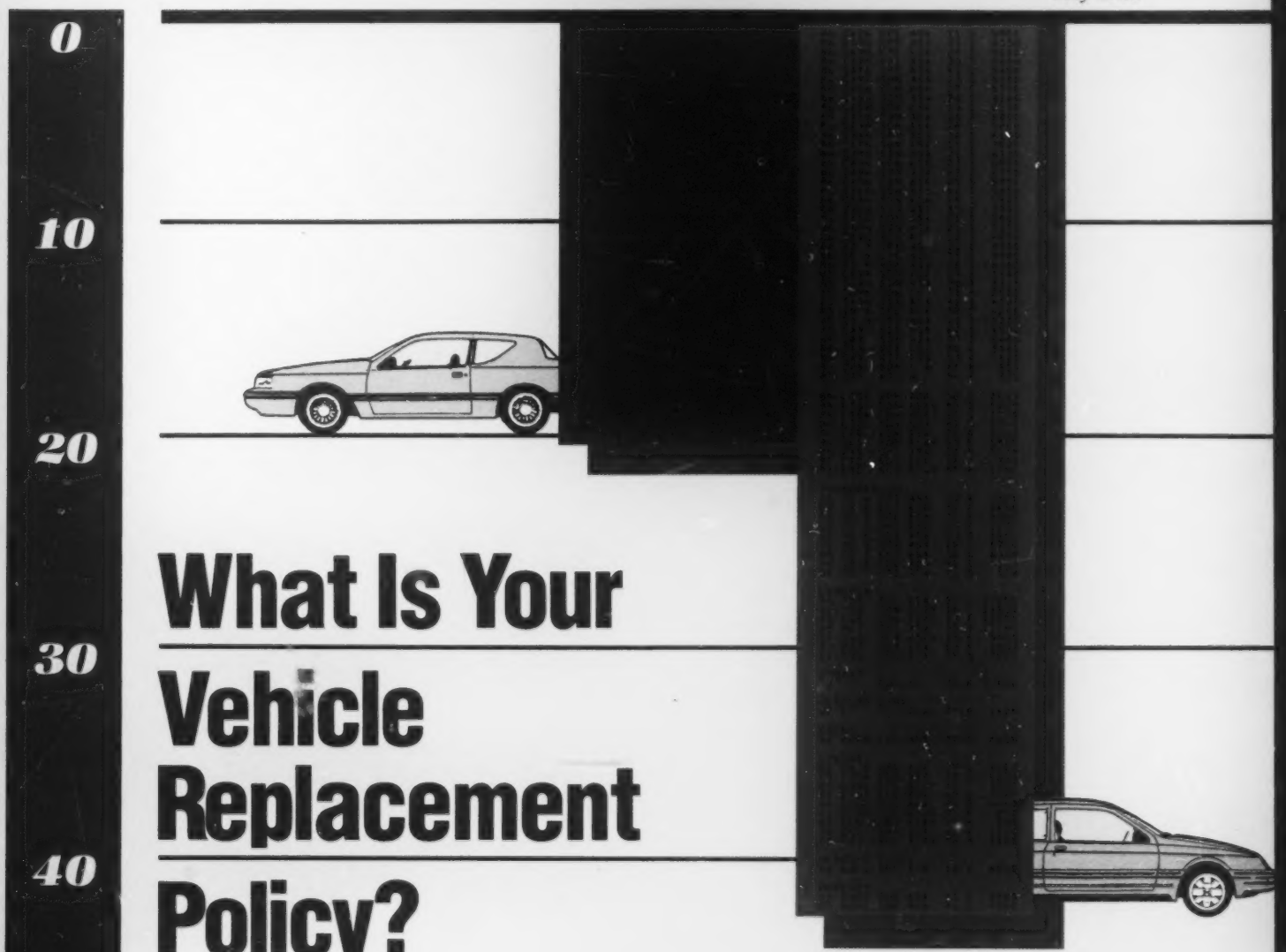

What Is Your Vehicle Replacement Policy?

ALSO INSIDE

Special 8-page Insert:
NAFA's 1987 Annual Report

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The Magazine for Vehicle Management
May 1988

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FEATURES

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NAFA's Annual Used Vehicle Marketing Survey Results

Used Vehicle Marketing Survey Response by Industry Category

U.S. Commercial Fleets	Fleets Responding		
Industrial Manufacturing	32		
Insurance	30		
Chemical & Petroleum	18		
Drugs & Cosmetics	17		
Food & Beverage	15		
Service Organizations	15		
Banking/Financial	14		
Consumer Manufacturing	14		
Communications	12		
Electronics	5		
Other	13		
Total U.S. Commercial Fleets		185	
U.S. Government Fleets	54		
U.S. Public Utility Fleets	29	83	
Total U.S. Fleets			268
* * *			
Canadian Fleets			
Drugs & Cosmetics	10		
Industrial Manufacturing	9		
Food & Beverage	6		
Consumer Manufacturing	4		
Government	4		
Chemical & Petroleum	3		
Communications	3		
Insurance	3		
Electronics	2		
Public Utility	2		
Service Organizations	2		
Other	1		
Total Canada Fleets			49
TOTAL SURVEY RESPONSE			317

Following is a brief interpretation of the results of NAFA's 1988 Used Vehicle Marketing Survey. The interpretation is given in three sections: U.S. Commercial Fleets; U.S. Government and Public Utility Fleets; and Canadian Fleets.

NAFA's 1988 Used Vehicle Marketing Survey received responses from 185 United States commercial fleets responsible for 183,956 vehicles; 88,308 vehicles are company-owned and 95,648 are leased. (All told, survey respondents control 245,506 company-owned vehicles and 109,898 leased vehicles, for a total of 355,404.)

Continuing the trend begun in 1986, U.S. commercial fleets last year kept their vehicles in service longer in terms of both months and mileage, according to survey results. In 1986, these fleets disposed of vehicles after an average of 30.2 months or 61,029 miles; in 1987 the numbers were 31 months or 64,356 miles; this year results show fleets kept their vehicles an average of 32 months or 64,540 miles.

It is interesting to note, however, that when specifically asked if they plan to change the length of time vehicles are kept in service, nearly three-quarters of these fleets said no. And, even more interestingly, of the 68 respondents planning a change, nearly half will *decrease* both the months and mileage for vehicles.

This latter point is reinforced by the fact that when asked in 1987 what their replacement policies would be for that year and for 1988, respondents averaged 40 months/65,808 miles and 45 months/64,740 miles, respectively. This year, when asked

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'88 Used Marketing Survey

(Continued from page 6)

that same question, respondents answered an average of 36 months/59,318 miles and 36 months/63,109 miles. (Respondents further claim their replacement policies for 1989 and 1990 to be 36 months/59,121 miles and 37 months/59,251 miles, respectively.)

These results seem to be saying U.S. commercial fleets are driving more miles in less months than previous and are, therefore, disposing of their vehicles earlier in their life spans.

When marketing their used vehicles, U.S. commercial fleets selected auto auctions as their favorite means of disposal, with sales to employees second on their list, and wholesalers third. This has been true for the past three years.

For the second straight year, fleet managers claim they most often use *Automotive Market Report* to determine prices of vehicles sold to employees.

Last year, U.S. commercial fleets disposed of more than 21,000 pre-1983 model year vehicles. Second was the sale of 20,156 1986 model year vehicles; third was the sale of 16,119 1983 model year vehicles. Less than 15 percent of these fleets reconditioned their vehicles before disposing of them.

U.S. Government and Public Utility Fleets

Eighty-three U.S. government and public utility fleets, responsible for 134,039 vehicles (128,197 company-owned; 5,842 leased), responded to the survey.

Reversing last year's trend, these fleets increased the number of months they kept their vehicles before disposing of them. In 1986, government fleets kept their vehicles an average of nearly 64 months; in 1987, the number declined to 55 months; this year, it is back up to an average of 60 months. Public utility fleets were at 66 months in 1986; 61 months in 1987, and 75 months in this year's survey.

In terms of the number of miles on an average vehicle in these fleets, government fleets continue their downward trend started in 1986, while public utility fleets show an increase in total average mileage for the third consecutive year.

This year, government fleets said the average vehicle disposed of had 85,127 miles; last year the number was 87,231; in 1986, the number was 91,679. And, it appears this trend will continue through next year. Nearly 60 percent of government fleets planning a change in their replacement policies said they will *decrease* both the months and miles vehicles are kept in service.

(Continued on page 12)

U.S. Fleets	Average Age of Vehicles Sold (1987) Months	Average Mileage of Vehicles Sold 1987	Written Replacement Policies Months/Miles			
			1987	1988	1989	1990
Drugs & Cosmetics	28	52,887	33/56,423	35/54,500	34/54,850	34/54,850
Food & Beverage	28	57,254	36/56,923	37/57,400	37/56,364	37/56,364
Insurance	30	53,484	33/55,346	32/54,673	33/54,150	33/54,150
Chemical & Petroleum	38	79,515	43/67,802	44/69,631	46/69,733	46/66,759
Industrial Manufacturing	30	63,290	35/57,983	35/58,135	36/58,075	36/57,974
Consumer Manufacturing	28	58,138	33/56,538	33/58,077	32/57,222	32/57,222
Banking/Financial	40	59,950	38/56,700	37/56,200	37/55,778	37/58,375
Communications	36	67,392	45/64,444	48/61,500	50/62,222	50/64,375
Service Organizations	31	73,144	35/63,438	37/68,511	30/62,500	30/62,500
Electronics	24	40,512	24/56,667	28/58,333	36/60,000	36/60,000
Other	34	61,486	36/66,667	37/66,667	38/70,714	39/72,143
(Avg. Total U.S. Commercial Fleets)	**(32)**	**(64,540)**	**(36/59,318)**	**(36/63,109)**	**(36/59,121)**	**(37/59,251)**
Government	60	85,127	64/80,643	64/80,258	64/80,903	64/80,433
Public Utility	75	86,286	63/75,658	61/74,615	61/74,615	61/74,615

'88 Used Marketing Survey

(Continued from page 8)

When asked their specific replacement policies for upcoming years, however, government fleet managers said they will keep vehicles an average of 64 months — which is higher than this year's average — and 80,668 miles — which is less than this year's average.

The opposite is true for public utility fleets. In 1986, these fleets drove an average of 78,550 miles on their vehicles before disposing of them. In 1987 the number was 81,362 miles; this year it is 86,286 miles. In terms of the number of months vehicles are kept, these fleets averaged 66 in 1986, 61 in 1987, and 75 this year. Only ten percent of these fleets said they plan a change in their replacement policies for next year. However, all who are planning a change said they will keep vehicles less months and less miles.

Of all the vehicles sold by responding U.S. government and public utility fleets, a vast majority were older than 1983 models. As is usually the case, both these fleet categories dispose of their vehicles primarily through auctions. Nearly 30 percent of government fleets and 14 percent of public utility fleets reconditioned vehicles before disposing of them.

Canadian Fleets

Fleet managers from 49 Canadian firms, responsible for 37,409 vehicles (29,001 company-owned; 8,408 leased) responded to NAFA's 1988 Used Vehicle Marketing Survey.

Canadian fleets remain steady in the length of time they keep their vehicles, coming in this year at an average of 33 months. Last year these fleets averaged 32 months; the year before, 32.2 months.

Also, average kilometers driven before vehicles were sold declined from last year's total, but remained higher than the 1986 average. This year, Canadian fleets said they drive vehicles an average of 91,612 kilometers before disposing of them; last year the average was 94,478 kilometers; in 1986, 78,460 kilometers.

Just above 14 percent of these fleets said they plan a change in their replacement policies for next year. Nearly 43 percent of those changing policies said they will decrease both the months and kilometers their vehicles are kept in service.

For Canadian fleets, the most popular methods for determining vehicle prices when selling fleet vehicles to employees were *Black Book* figures (57.1 percent) and computation of their accounting (book) value (38.1 percent).

Surprisingly, of all options listed as means of disposing of fleet vehicles (sell to employees;

U.S. Fleets	% Planning Change in Length Vehicles Kept in Service	Of % Planning Change...	% Planning Increase in Months and Miles Vehicles Kept in Service	% Planning Decrease in Months and Miles Vehicles Kept in Service	% Planning Increase Miles/ Decrease Months or Decrease Miles/ Increase Months
Drugs & Cosmetics	29.4%		0	40.0%	60.0%
Food & Beverage	6.7%		0	100%	0
Insurance	26.7%		75.0%	25.0%	0
Chemical & Petroleum	33.3%		50.0%	50.0%	0
Industrial Manufacturing	28.1%		11.1%	55.6%	33.3%
Consumer Manufacturing	7.1%		0	0	100%
Banking/Financial	28.6%		75.0%	25.0%	0
Communications	16.7%		0	100%	0
Service Organizations	40.0%		50.0%	33.3%	16.7%
Electronics	20.0%		100%	0	0
Other	30.8%		50.0%	50./0%	0
(Avg. Total U.S. Commercial Fleets)	**(25.4%)**		**(40.4%)**	**(42.6%)**	**(17.0%)**
Government	40.7%		38.1%	57.1%	4.8%
Public Utility	10.3%		0	100%	0

auctions; wholesalers; used car dealers; new car dealers; salvaged, and other) Canadian fleets cited "Other" most frequently, with auctions a close second.

Only 8.2 percent of Canadian fleets recondition vehicles before selling them.

For a Canadian's interpretation of that country's Used Vehicle Marketing Survey results, please turn the page.

Pages 16 and 17 feature a comparison of 1987 and 1988 U.S. and Canadian survey results.

Since May 9, 1985, fleets and other sellers of used cars have had to comply with the Federal Trade Commission's "Used Car Rule".*

Under the rule, sellers must:

- Prepare and display a "Buyers Guide" on each used vehicle
- Include a special disclosure in the sales contract
- Identify final warranty items in the sales contract
- Provide purchaser with a copy of the Buyers Guide which includes the final warranty items.

The FTC rule applies to all used car sales by fleets, except where vehicles are sold to employees or through auctions open *only* to dealers. Also, if vehicles are sold through auctions, fleets must comply with the rule if the auction is open to, and the sale is advertised to, consumers.

In the three years since the rule's inception, FTC has stood by its requirement, saying it was good for the consumer. Now, however, they say while there is a general understanding of what is required by the rule, there is a "steady stream" of questions from fleets, dealers and consumers on what they have to do to comply with the rule. (FTC also reports compliance with the rule is "mixed" and several enforcement actions against dealers are underway, with penalties forthcoming.)

What are your experiences with the "Used Car Rule"?

NAFA is very interested in hearing from our Members and Affiliates on how they have coped with the rule and the obstacles they have run into. If you have information or comments, please send them to NAFA Headquarters.

*Individuals or companies selling, or offering to sell, fewer than six cars in a twelve-month period are exempt from the rule.

What source is used to determine prices of vehicles sold to employees?

U.S. Fleets	NADA	AMR	Independent Wholesaler	Black Book	Blue Book	Red Book	Retail Market	Your Book Value	Leasing Company Adjustment	Other		Recondition Vehicles Before Selling Them
Drugs & Cosmetics	18.8%	37.5%	0	6.3%	18.8%	6.3%	0	18.8%	37.5%	6.3%		17.6%
Food & Beverage	14.3%	85.7%	7.1%	7.1%	14.3%	0	0	28.6%	7.1%	7.1%		20.0%
Insurance	37.0%	51.9%	3.7%	14.8%	7.4%	3.7%	7.4%	14.8%	11.1%	7.4%		0
Chemical & Petroleum	42.9%	71.4%	7.1%	14.3%	0	0	14.3%	14.3%	14.3%	7.1%		16.7%
Industrial Manufacturing	33.3%	70.0%	3.3%	6.7%	3.3%	0	6.7%	23.3%	16.7%	13.3%		6.3%
Consumer Manufacturing	14.3%	71.4%	14.3%	7.1%	7.1%	0	0	28.6%	14.3%	14.3%		28.6%
Banking/Financial	62.5%	50.0%	25.0%	37.5%	25.0%	0	12.5%	37.5%	12.5%	25.0%		35.7%
Communications	0	37.5%	0	12.5%	25.5%	0	0	0	25.0	0		25.0%
Service Organizations	25.0%	33.3%	0	8.3%	33.3%	0	0	25.0%	33.3%	0		13.3%
Electronics	0	40.0%	20.0%	0	0	0	0	40.0%	20.0%	60.0%		20.0%
Other	50.0%	33.3%	25.0%	16.7%	8.3%	0	0	33.3%	16.7%	16.7%		7.7%
(Avg. Total U.S. Commercial Fleets)	**(29.4%)**	**(56.3%)**	**(7.5%)**	**(11.3%)**	**(11.3%)**	**(1.3%)**	**(4.4%)**	**(22.5%)**	**(18.1%)**	**(11.3%)**		**(14.6%)**
Government	0	0	0	0	50.0%	0	0	0	100%	100%		29.6%
Public Utility	33.3%	16.7%	8.3%	16.7%	16.7%	0	0	33.3%	16.7%	25.0%		13.8%

Note: Respondents could choose all options that applied.

'88 Used Marketing Survey

(Continued from page 13)

A Canadian Point of View

Certain Canadian NAFA Members felt their country's 1988 Used Vehicle Marketing Survey Results did not fully represent the used fleet vehicle market in Canada in some instances.

It was the general consensus that a large government or public utility fleet responded to the survey and distorted the results. (Government and public utility fleets generally keep their vehicles in service longer, and dispose of their vehicles differently, than commercial fleets.)

Canadians said the ratio of company-owned to leased vehicles for responding Canadian fleets was not indicative of their fleet industry. The overwhelming number of company-owned vehicles, they said, points to responses from government or public utility fleets.

Also, the majority of respondents said they dispose of their fleet vehicles through "Other" methods, rather than by selling to employees or through auctions, wholesalers, or new or used car dealers.

This may be because many responding fleets simply return their vehicles to their leasing companies and have nothing further to do with the sale of the vehicle. So, despite the fact leasing companies may sell the cars through some of the options listed in the survey, fleet managers responded "Other" because they themselves do not sell the vehicles.

Most other averages received from Canadian respondents (age of vehicles sold; mileage of vehicles sold; percent planning some change in length of service, etc.) were, however, deemed indicative of the Canadian used fleet vehicle market. In fact, when compared to U.S. results, the numbers are virtually on par with each other.

Canada	
Average Age of Vehicles Sold in 1987	33 months
Average Mileage of Vehicles Sold in 1987	91,612 Km
Written Replacement Policies	Months/Kilometers
1987	36/92,963
1988	36/93,141
1989	36/93,741
1990	36/94,635
Percent Planning Change in Length Vehicles Kept in Service	14.3%
% Planning Increase in Months and Kilometers Vehicles Kept in Service	28.6%
% Planning Decrease in Months and Kilometers Vehicles Kept in Service	42.8%
% Planning Increase Months/Decrease Kilometers or Decrease Months/Increase Kilometers	28.6%
Sources Used to Determine Prices of Vehicles Sold to Employees:	
NADA	0%
AMR	0%
Independent Wholesaler	16.7%
Black Book	57.1%
Blue Book	0%
Red Book	11.9%
Retail Figures	7.1%
Your Book Value	38.1%
Leasing Company Adjusted Price	26.2%
Other	19.0%
Recondition Vehicles Before Selling Them	8.2%
Sources Used To Sell Used Vehicles:	
Auctions	28.8%
Employees	15.6%
Wholesalers	11.8%
New Car Dealers	7.6%
Used Car Dealers	0.7%
Salvaged	0.6%
Other	34.9%

'87-'88 Used Vehicle Marketing

Fleets Responding

	1987	1988	+/-
U.S. Commercial Fleets	280	185	-95
U.S. Government Fleets	50	54	+4
U.S. Public Utility Fleets	27	29	+2
Canadian Fleets	49	49	0
Total Respondents	406	317	-89

Total Vehicles

Company-Owned			
U.S. Commercial Fleets	54,476	88,308	+33,832
U.S. Government Fleets	30,126	88,490	+58,364
U.S. Public Utilities Fleets	13,183	39,707	+26,524
Canadian Fleets	4,478	29,001	+24,523
Total Company-Owned Vehicles	102,263	245,506	+143,243
Leased			
U.S. Commercial Fleets	91,748	95,648	+3,900
U.S. Government Fleets	152	688	+536
U.S. Public Utilities Fleets	1,216	5,154	+3,938
Canadian Fleets	9,560	8,408	-1,152
Total Leased Vehicles	102,676	109,898	+7,222
Total Vehicles			
U.S. Commercial Fleets	146,224	183,956	+37,732
U.S. Government Fleets	30,278	89,178	+58,900
U.S. Public Utilities Fleets	14,399	44,861	+30,462
Canadian Fleets	14,038	37,409	+23,371
Total Vehicles in Fleets	204,939	355,404	+150,465

Number of Model Year Vehicles Sold

U.S. Fleets (Total)			
Older than 1983	NA	21,020	+21,020
1983 Model Year	14,272	16,119	+1,847
1984 Model Year	24,290	9,566	-14,724
1985 Model Year	11,925	5,806	-6,119
1986 Model Year	4,882	20,156	+15,274
1987 Model Year	NA	5,798	+5,798
Canadian Fleets			
Older than 1983	NA	3,121	+3,121
1983 Model Year	863	1,086	+223
1984 Model Year	1,430	579	-851
1985 Model Year	437	598	+161
1986 Model Year	66	1,314	+1,248
1987 Model Year	NA	685	+685

Survey Results Comparison

Average Age of Vehicles Sold

Months			
U.S. Commercial Fleets	31	32	+1
U.S. Government Fleets	55	60	+5
U.S. Public Utilities Fleets	61	75	+14
Canadian Fleets	32	33	+1
Miles			
U.S. Commercial Fleets	64,356	64,540	+184
U.S. Government Fleets	87,231	85,127	-2,104
U.S. Public Utilities Fleets	81,362	86,286	+4,924
Canadian Fleets	94,478km	91,612km	-2,866

Selling Methods
Number of Vehicles Sold in Each Category

U.S. Commercial Fleets	**1987**	**1988**	**+/-**
Employees	15,023	14,499	-1,772
Wholesalers	26,367	10,361	*
Auctions	*	18,439	*
Used car dealers	3,026	2,783	-243
New car dealers	3,250	2,336	-914
Salvaged	3,743	786	**
Other	**	3,643	**
U.S. Government Fleets			
Employees	21	28	+9
Wholesalers	3,291	138	*
Auctions	*	9,225	*
Used car dealers	25	290	+265
New car dealers	80	73	-7
Salvaged	84	6,988	**
Other	**	2,149	**
U.S. Public Utilities Fleets			
Employees	438	172	-266
Wholesalers	1,803	34	*
Auctions	*	4,883	*
Used car dealers	399	1,401	+1,002
New car dealers	26	28	+2
Salvaged	84	14	**
Other	**	200	**
Canadian Fleets			
Employees	1,421	1,155	-266
Wholesalers	1,557	870	*
Auctions	*	2,126	*
Used car dealers	43	54	+9
New car dealers	213	563	+350
Salvaged	196	44	**
Other	**	2,571	**

*Wholesalers and Auctions categories were combined in 1987.
**Salvaged and Other categories were combined in 1987.

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The Magazine for Vehicle Management
September 1988

BASIC REQUIREMENTS FOR A FLEET SAFETY POLICY ... PAGE 4

PLUS!!

COMPLETE TEXT OF THE RECENTLY ANNOUNCED FEDERAL ODOMETER REGULATIONS ... HOW WILL THEY AFFECT YOU? ... PAGE 30

ANNUAL FLEET SAFETY ISSUE

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NAFA Fleet Executive

The Magazine for Vehicle Management

September 1988

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Interior, Exterior Components Make Today's Cars Safe Machines

The most important safety feature inside a car is the initiative of its occupants. They must buckle up.

The seatbelt is the most effective protection against occupant injuries and fatalities, yet, according to U.S. Department of Transportation (DOT) estimates, less than 35 percent of all drivers regularly buckle up. Although 32 states and the District of Columbia have belt laws, usage in those areas is "regular" for only about 49 percent of the drivers. In states not having seat-belt laws, only 23 percent of drivers buckle up.

DOT, noting the above figures, has mandated use of passive restraints—automatic seatbelts or air bags.

Automatic seatbelts work two ways: A shoulder strap attached to the highest corner of the door so that every time the door is opened or closed the belt moves into place across the occupant's chest or out of place–away from the occupant; or, a motorized shoulder strap in a track on the inside of the seam of the door and roof which moves automatically each time the door is opened and closed. Nearly 25 percent of all 1988 model year passenger cars protect occupants with front-seat automatic belts; these devices will become more prominent in model years 1989 and 1990 to meet the DOT mandate.

Newer seatbelts automatically lock during quick stops; more modern belts have "automatic tensioning" to carry protection one step further. With this system, a cable is attached to the seatbelt retractors and connected to the car's engine

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Insurance Companies Offering Discounts

Automobile insurance companies have announced discounts in personal injury and medical payment premiums for cars with factory-installed automatic safety belts and/or airbags.

The discounts apply to premiums for medical payments for occupants of the insured automobile or, in states with no-fault insurance, to personal injury protection for the occupants of the insured vehicle.

The following percent discounts are available for each safety device:

Insurer	Airbags		Automatic Belts
	Driver Side	Full Front	
Aetna Casualty	30%	30%	30%
Allstate	20	30	30
AMICA	30	30	30
Continental Casualty	30	30	30
GEICO	30	30	30
Hartford	20	30	30
Liberty Mutual	20	30	30
Nationwide	25	40	10
Prudential	30	30	20
State Farm	20	30	10
Travelers	15	30	30
USAA	60*	60*	30

* plus additional incentives

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and transmission. In a frontal collision, the engine and transmission are forced back, tightening the cable and putting tension on the lap and shoulder belts—firmly holding the occupant in place.

In addition to saving lives and preventing injuries, use of lap and shoulder belts may result in a cut in insurance rates, depending upon your insurance carrier. (See chart.)

All About Airbags

A collision usually takes three-tenths of a second from start to finish. Airbags inflate less than 30 milliseconds after a collision starts. This timing of inflating and deflating is critical to occupant protection.

For maximum effectiveness, the airbag must be used with at least a lap belt to keep the driver or passenger in the correct, upright position. As currently designed, airbags protect only drivers and front-seat passengers and only in frontal collisions.

There are two types of airbag systems: Electronic and mechanical. In the electronic system, a collision's severity is identified by sensors and a signal is sent to the control module. The module determines whether the impact qualifies for protection. If so, the module electronically fires the gas generator to inflate the airbag. The timespan for this is ten one-thousandths (10/1,000) of a second.

In the mechanical system, the sensor is in the steering wheel behind the airbag. When the sensor registers a collision, it releases a spring-loaded firing pin which strikes the primer, inflating the airbag.

Under development are combination airbag/seatbelt systems featuring belt tensioning for the driver and front-seat passenger, with an airbag in the steering wheel. As the airbag inflates, signals go to the seat belts, tightening them against both driver and passenger.

By 1990, annual production of airbag-equipped cars is expected to exceed two-million.

Beyond Airbags

A new passive restraint device, claimed to supersede airbags as the safety device of the future, is under study by Chrysler Corp.

The "Safety Seat" fits under a car seat and consists of metal frames, similar to picture frames, connected by folding metal braces. One frame is attached to the bottom of the seat, the other to the floor of the car. In a head-on collision, the braces unfold and move the seat slightly forward and up, in a rotating motion. The motion allows the car to absorb the energy of the crash before the energy can reach the passenger in the seat.

Safety Seat's inventor claims the device is superior to airbags because it is cheaper and it resets itself within milliseconds after an accident, so it can protect passengers in multiple collisions.

In a recent demonstration, a driver slammed a Safety Seat-equipped car head-on into a parked car at speeds of 30 and 50 miles an hour and was not harmed.

In addition to seatbelts and airbags, auto manufacturers have developed both interior and exterior components making vehicles safer to drive.

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The Toyota Fleet Perspective

The most important goal to Toyota is complete customer satisfaction. It's our ongoing commitment to satisfy you every step of the way. With over 1,000 Toyota Dealers nationwide, we are readily available to meet your parts, service and overall fleet needs. But it doesn't end there. With Toyota's new 36-mo./36,000-mile basic new vehicle limited warranty, your fleet's covered all the way from roof liner to lug nuts.* No deductible, no transfer fee, and a 5-yr./unlimited-mileage warranty on corrosion/perforation. For more personalized information, contact the Toyota Regional Fleet Manager nearest you.

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*Excluding normal maintenance and wear and tear items.

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Improved door and body structure provides major protection in side-impact collisions. In a crash, door hinge and latch strength is critical to the door staying closed—and the occupant staying inside the vehicle. Front and rear door structures have been strengthened in recent years to take the brunt of an impact and keep the passenger compartment intact. This assures that the vehicle absorbs as much of the force of the impact as possible.

(A major federal proposal to improve side impact protection for automobile occupants was recently introduced in Washington. Under the proposal, a 3,000 pound barrier would strike a stationary car at midpoint, simulating a side-impact collision. A side-impact dummy inside the struck car would measure the levels of damage to the lower spine, ribs and pelvis. This compares with the present rule requiring each car door to resist crush forces applied by a piston pressing a steel cylinder into a door's exterior during a laboratory test. Car makers generally meet this standard by incorporating a steel beam in side doors.)

Better Bumpers

Bumper strength also plays an important role in vehicle occupant protection. Since 1982, auto manufacturers have equipped cars with "no damage" bumpers to meet federal legislation requiring them to do so. However, manufacturers are now only required to install bumpers that withstand 2.5 miles per hour impacts rather than the original 5 mph standard. Vehicles with 2.5 mph bumpers have shown to have a 60 percent higher collision claim record than 5 mph bumper vehicles. When vehicles are equipped with stronger bumpers, minor impacts result in either no damage (hence no claim) or damage less than the deductible amounts of insurance policies.

Anti-lock braking systems (ABS) improve the ability to stop in shorter distances and help drivers maintain control of their vehicles in emergencies. ABS react to both driver input and road conditions to ensure and maintain proper braking. Sensors at each wheel monitor the wheels' rotation speeds so if one wheel begins to slow down more quickly than the others—indicating impending wheel-lock—a signal is sent to the hydraulic circuit. The circuit will begin pumping the brakes for that wheel to keep it moving and avoid skidding.

ABS are available on 47 models of 1988 cars sold in the U.S. Twenty-six models offer them as standard equipment; 21 as optional equipment.

Interior Features

Special materials and reinforced structures are also part of the interior safety system. Improvements include an energy-absorbing instrument panel and steering system, as well as laceration-resistant windshields.

Unbelted drivers usually strike the steering wheel and dashboard during a collision (which is further evidence why drivers should always use their seatbelts).

An energy-absorbing steering column collapses as a driver hits the steering wheel and dashboard, lessening the possibility of severe injuries.

Safety glass has been a feature on many cars since 1972. The newest development, a four-layer, inner-shield windshield, has an outside layer of glass, a middle layer of plastic energy-absorbent material, an inside layer of glass and an anti-laceration "skin." If this windshield is shattered in a collision, the inner film remains intact, virtually eliminating the chance of occupants suffering cuts from spewn glass.

Prescribed Medication and Driving

Drivers who have been treated with sedatives or other prescription drugs often have serious problems on the road, according to reports made public at the Second International Symposium on Medicinal Drugs and Driving Performance.

One report involved 317 drivers suspected of drunken driving. Blood samples were taken, and the drivers were subjected to a battery of tests designed to measure psychomotor skills such as mental and motor functions, time orientation, ability to count backward and the individual's own overall appraisal of his/her performance.

A normal overall test score is 15; the worst possible score is 148. On the test group, those with evidence of only alcohol in the blood averaged 78; those with evidence of sedatives averaged 91; those with a combination of drugs and alcohol averaged 108.

Authors of the survey warn that while persons may become tolerant of the effects of prescribed sedatives or drugs, the tolerance is not always complete and may be overridden if combined with alcohol.

The report suggested a label warning system be implemented indicating whether the prescribed drug has no effect, little effect or major effect on driving performance.